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THE TRAINING OF TEACHERS



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THE
TRAINING OF TEACHERS
FOR

SECONDARY SCHOOLS IN GERMANY
AND THE UNITED STATES

BY

JOHN FRANKLIN BROWN, PH.D.
AUTHOR OF "THE AMERICAN HIGH SCHOOL"

THE MACMILLAN COMPANY

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PREFACE

It is just one hundred years since Prussia consciously and seriously faced the problem of providing adequate training for the teachers of her higher schools and, under the leadership of William von Humboldt, sketched the broad, statesmanlike policy which it has been the work of a century to develop. The specific forms which the problem has taken at different times within this period find striking analogy in the United States to-day. We cannot adopt *in toto* German means and methods,—the social and political ideals of the two nations are so different as to make such action impossible even if it were desirable; but we can carefully study them and adapt them to our needs, thus profiting by the century of thought and experience which have made the German schools the most famous in the world.

It is the purpose of this book, first, to describe as concretely as possible the standards and institutions which exist in Germany to-day for the training of teachers in the higher or secondary schools, giving enough of their history to show their evolution during the past century; second, in the light of Germany's experience, to discuss a standard and a plan for the training of teachers in American high schools.

The material for Part I was largely gathered in 1909 while I was serving as exchange teacher of English in the *Oberrealschule* of the *Franckesche Stiftungen* at Halle a. S. The courtesy of German officials and educators in furnishing assistance and information left nothing to be desired. While I cannot name them all on account of the number, I wish to express my obligations to them and my hearty appreciation of their kindness. I should be ungrateful, however, if I did not mention specifically Dr. Wilhelm Fries, Director of the *Franckesche Stiftungen*, Director of the Gymnasial Seminar, and Professor of Pedagogy in the University of Halle, whose scholarly writings, personal kindness, and professional interest in my report were invaluable. Without his unfailing assistance the work in its present form would have been impossible. I am also indebted to several English and American friends who have given valuable suggestions in connection with Part II and the Appendix.

J. F. B.

NEW YORK,
November, 1910.

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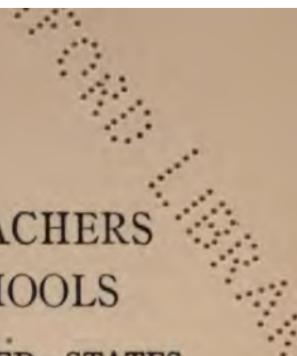
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PART I
THE TRAINING OF GERMAN TEACHERS



THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS IN GERMANY AND THE UNITED STATES

CHAPTER I

PRUSSIAN SCHOOLS¹

IN Germany as in the United States each individual state has its own school system; but unlike our state control, that of Germany is thoroughgoing and exhaustive. Especially is this true in Prussia, where it often extends to the most minute details. It is exercised through ministries at Berlin, which are directly under control of the crown.

Aside from the universities and the distinctly professional and vocational schools, which are not included in this discussion, the schools of Prussia consist of two rather sharply separated divisions. The first division includes those schools which are designed to train the children of the laboring and the lower business classes and may be named elementary. The second division

¹ There are some differences between the schools of Prussia and those of the other German states, but the former may be regarded as typical of German schools.

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includes the so-called higher or secondary schools, which are designed to train those who are to enter the universities and those who are to serve as lower state officials or as representatives of the larger business life. The two parts of the system may be represented as follows:—

Elementary school division:	<i>Volksschule,</i> <i>Mittelschule,</i> <i>Fortbildungsschule.</i>
Higher or secondary school division:	<i>Vorschule,</i> <i>Gymnasium,</i> <i>Realgymnasium,</i> <i>Oberrealschule,</i> <i>Reformgymnasium</i> and <i>Reformrealgymnasium,</i> <i>Progymnasium,</i> <i>Realprogymnasium,</i> <i>Realschule,</i> <i>Höhere Mädchenschule</i> or <i>Töchterschule,</i> <i>Gymnasium, Realgymnasium,</i> and <i>Oberrealschule</i> for girls, <i>Frauenanstalt,</i> <i>Lehrerinnenseminar.</i>

Elementary Schools. — The *Volksschule* is the school for the children of the lower classes, including mainly laborers and the small business people. It is entirely

free and in necessitous cases books and clothing are furnished the children. Attendance upon it is absolutely required from the age of six to fourteen unless the child attends some other school or receives satisfactory private instruction. The subjects taught are reading, writing, spelling, arithmetic, history, geography, drawing, gymnastics, singing, and religion. Every detail of the ordinary *Volksschule* is regulated by the ministry of education. The management of the *Hilfsschule*, or auxiliary school, a new and special department of the *Volksschule* for backward and incompetent children, is left largely to the director and teachers.

The *Mittelschule* is organically very similar to the *Volksschule*, the principal difference being that French and English are taught and the course is often one year longer. The real difference between it and the *Volksschule* lies in the fact that the pupils attending it come from distinctly better homes and are superior in intelligence and ambition. In its spirit and in the quality of the work done it is more like the *Realschule* than the *Volksschule*. A tuition fee of from ten to twenty-five dollars per year is required. It is patronized by the lower middle classes, especially the tradespeople. Not more than one twentieth as many pupils are found in the *Mittelschule* as in the *Volksschule*. The *Mittelschule* has taken the place of the earlier *Bürgerschule* and, in its present form, is a relatively recent development. Con-

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ditions for its management have not yet been definitely prescribed by the ministry, and each director is given large freedom in the control and management of his own school. When the collective experience of these men seems sufficient to form a satisfactory basis for expert judgment, a detailed program of procedure will probably be issued by the ministry for the management of the *Mittelschule*. At present it is rejoicing in its freedom.

The *Fortbildungsschule* takes the boys and some of the girls when they have finished the work of the *Volksschule* and the *Mittelschule* and gives them instruction in subjects connected with trade or business. Attendance for girls is voluntary, for boys it is usually required six hours per week until they are seventeen years old. Many of these boys and girls are already serving as apprentices in trade or business, and their employers are required to allow them time in the afternoon or evening to attend their classes. It is the purpose of this school not to duplicate but to supplement the instruction by the employer, thus rendering the apprentice more efficient than he would otherwise be. Every means is used to make the work of the pupil directly helpful in his chosen vocation. Instructors are chosen from the ranks of *Volksschule* and *Mittelschule* teachers and from competent mechanics and tradespeople. The work of the *Fortbildungsschule*, like that of the *Mittelschule*, is now

left largely to the discretion of the director and his local advisers. The establishment of a *Fortbildungsschule* is optional with local school authorities, but an imperial decree requires that if one is established, the employers of boys and girls for whom it is intended must give them opportunity to attend it.

Higher Schools.—The *Vorschule* is an elementary school, so far as its work is concerned, but it is ranked with the higher schools because it is preparatory to them, and it is usually connected with a higher school. Boys enter it at six, and the course is three years in length. The subjects taught are the same as those in the first three years of the *Volksschule*, but they are taught with reference to the needs of the boy when he shall enter the higher school. The greater ability and higher ambitions of pupils make possible a much better grade of work. It is possible for pupils to enter the higher schools from the *Volksschule* or the *Mittelschule*, but nearly all of them go by way of the *Vorschule*.

The higher schools, of which the *Gymnasium* is the oldest form, lead to the university, and their graduates are given certain social and vocational privileges. The history of the *Gymnasium* goes back to the middle of the sixteenth century. For a long time it held sway alone. The *Realgymnasium* and the *Oberrealschule* first appeared some two hundred years later, and, in their present form, they are creations of the last quarter of the

Notes
date

nineteenth century. In Prussia in 1908 there were 332 *Gymnasien* with 101,094 pupils, 124 *Realgymnasien* with 37,683 pupils, 75 *Oberrealschulen* with 30,702 pupils, and 171 *Realschulen* with 33,465 pupils.¹ The *Gymnasium* has fought hard to maintain its supremacy, but the *Realgymnasium* and the *Oberrealschule* are slowly gaining on it. Since 1900 the three schools have been legally equal in rights, but practically the prestige of the *Gymnasium* remains greater because of the influence of tradition and the preference given it by many educators. The higher classes still prefer to send their boys to a *Gymnasium*. The great majority of higher schools of all kinds are public day schools. The relatively few private boarding and day schools conform to state requirements so far as quantity, quality, and kind of work are concerned. The course of study of the *Gymnasium*, *Realgymnasium*, and *Oberrealschule* is nine years in length. Pupils usually enter at nine and leave at eighteen, although some, requiring more time to complete the work, remain till they are twenty. There are no sharp limitations with reference to age. In Prussia the course of study for each of the higher schools is prescribed by the ministry. A boy is at liberty to choose which kind of school he will enter; but, once he has chosen, he is required to pursue the curriculum prescribed for that school. With slight exception in the *Gymnasium*, he

¹ *Jahrbuch der höheren Schulen*, XXX, 2, 146.

can secure other subjects only by taking them as extras, and the average boy finds the prescribed curriculum so heavy that he attempts nothing more. Election is practically limited to the choice between schools, and for pupils who live in a community in which but one kind of school is available, there is really no choice. The prescribed curricula for the Prussian *Gymnasium*, *Realgymnasium*, and *Oberrealschule* for boys are as follows¹ :—

CURRICULUM OF BOYS' GYMNASIUM

CLASS	VI	V	IV	UIII	OIII	UII	OII	UI	OI	TOTAL
Religion .	3	2	2	2	2	2	2	2	2	19
German and history stories .	3	2	3	3	2	2	3	3	3	26
Latin . .	8	8	8	8	8	7	7	7	7	68
Greek . .	—	—	—	6	6	6	6	6	6	36
French . .	—	—	4	2	2	3	3	3	3	20
History . .	—	—	2	2	2	2	3	3	3	17
Geography . .	2	2	2	1	1	1	3	3	3	9
Arithmetic, algebra, and geometry . .	4	4	4	3	3	4	4	4	4	34
Natural sciences . .	2	2	2	2	2	2	2	2	2	18
Writing . .	2	2	—	—	—	—	—	—	—	4
Drawing . .	—	2	2	2	2	—	—	—	—	8
Total .	25	25	29	30	30	30	30	30	30	259

Required, in addition, 3 hours gymnastics for all classes and 2 hours singing for classes VI and V.

Optional, in addition, from UIII on, 2 hours drawing; from OII on, 2 hours English and 2 hours Hebrew.

¹ Lehrpläne und Lehraufgaben für die höheren Schulen in Preussen.

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Special instruction in writing is prescribed for pupils in IV and III whose handwriting is poor.

In the three higher classes (OII, UI, and OI), English may be substituted for French, the French remaining as an optional subject with 2 hours per week.

For Greek in UIII, OIII, and UII, may be substituted English 3 hours per week for each year, and in UIII and OIII 2 hours French and 1 hour mathematics; in UII 1 hour French and 2 hours mathematics and natural science.

OI, or *Oberprima*, is the highest class; VI, or *Sexta*, the lowest. UI is called *Unterprima*; OII, *Obersecunda*; UII, *Untersecunda*; OIII, *Obertertia*; UIII, *Untertertia*; IV, *Quarta*; V, *Quinta*.

CURRICULUM OF BOYS' REALGYMNASIUM

CLASS	VI	V	IV	UIII	OIII	UII	OII	UI	OI	TOTAL
Religion . . .										
German and history stories . . .	3 1	3 4	2 1	2	2	2	2	2	2	19
Latin	8	8	7	5	5	4	4	4	4	49
French	—	—	5	4	4	4	4	4	4	29
English	—	—	—	3	3	3	3	3	3	18
History	—	—	2	2	2	2	3	3	3	17
Geography	2	2	2	2	2	1	3	3	3	11
Arithmetick, algebra, and geometry	4	4	4	5	5	5	5	5	5	42
Natural sciences	2	2	2	2	2	4	5	5	5	29
Writing	2	2	—	—	—	—	—	—	—	4
Drawing	—	2	2	2	2	2	2	2	2	16
Total . . .	25	25	29	30	30	30	31	31	31	262

Required, in addition, 3 hours gymnastics for all classes and 2 hours singing for classes VI and V.

Optional, in addition, from OIII on, 2 hours linear drawing.

Special instruction in writing is prescribed for pupils in IV and III whose handwriting is poor.

CURRICULUM OF BOYS' OBERREALSCHULE

CLASS	VI	V	IV	UIII	OIII	UII	OII	UI	OI	TOTAL
Religion	3	2	2	2	2	2	2	2	2	19
German and history stories	4 { 5	3 { 1	4	4	3	3	4	4	4	34
French	6	6	6	6	6	5 { 4	4 { 4	4 { 4	4 { 4	47
English	—	—	—	5	4	4 { 4	4 { 4	4 { 4	4 { 4	25
History	—	—	3	2	2	2	3	3	3	18
Geography	2	2	2	2	2	1	1	1	1	14
Arithmetic, algebra, and geometry	5	5	6	6	5	5	5	5	5	47
Natural sciences	2	2	2	2	4	6	6	6	6	36
Writing	2	2	2	—	—	—	—	—	—	6
Free-hand drawing	—	2	2	2	2	2	2	2	2	16
Total	25	25	29	30	30	30	31	31	31	262

Required, in addition, 3 hours gymnastics for all classes and 2 hours singing for classes VI and V.

Optional, in addition, from OIII on, 2 hours linear drawing.

Special instruction in writing is prescribed for pupils in III whose handwriting is poor.

Choice between the *Gymnasium*, the *Realgymnasium*, and the *Oberrealschule* must be made for the boy when he is not more than nine years old, otherwise he will be at a disadvantage in the rearrangement of his work if he changes from one to the other. The manifest objections to this requirement have given rise to schools known as the *Reformgymnasium* and *Reformrealgymnasium*. The subjects pursued in the reform schools are the same as those required in the others of similar name, but the arrangement and grouping are such that final decision concerning the course to be taken can be deferred to the age of twelve. French takes

the place of Latin in the earlier years, and the number of hours of Latin is correspondingly increased during the later years of the course.

The *Progymnasium*, *Realprogymnasium*, and *Realschule* are schools in which only the first six years' work of the nine-year course is given. They are found in those cities which are unable to support the full course. In some cases the arrangement of the work is slightly changed from that prescribed for the nine-year course, but it is always possible for a boy to go from the six-year school to the corresponding nine-year school and complete the course in the regular time. These six-year schools have prospered especially because of the fact that boys who have satisfactorily passed the examination required for the leaving certificate are given the much-coveted privilege of serving but one year in the army and of entering upon the career of an officer in case they choose the army as a profession.

The higher *Mädcheneschule* (also called *Töchterschule*) for girls is a ten-year institution, covering the years from six to sixteen. For some time the nine-year school and the ten-year school existed together, the former being considered the standard, the latter an experimental deviation from it; but the number of ten-year schools rapidly increased, and in 1908 this type was officially recognized as the normal. The higher *Mädcheneschule* is a public day school organized and managed much

as are the higher schools for boys. The prescribed curriculum is as follows:—

GENERAL CURRICULUM FOR HIGHER *MÄDCHENSCHULE*

CLASS	LOWER CLASSES (<i>Vorschule</i>)			MIDDLE CLASSES			HIGHER CLASSES				TOTAL
	X	IX	VIII	VII	VI	V	IV	III	II	I	
											VII-I
Religion	3 ¹	3 ¹	3 ¹	3	3	3	2	2	2	2	17
German	10	9	8	6 ²	5	5	4	4	4	4	32
French	—	—	—	6	5	5	4	4	4	4	32
English	—	—	—	—	—	—	4	4	4	4	16
History ³ and History of Art	—	—	—	— ⁴	2	2	2	2	2	3	13
Geography	—	—	2 ⁵	2	2	2	2	2	2	2	14
Arithmetic, algebra, and geometry	3 ¹	3 ¹	3 ¹	3	3	3	3	3	3	3	21
Nature study	—	—	—	2	2	2	3	3	3	2	17
Writing	—	3	2	1	1	1	—	—	—	—	3
Drawing ⁴	— ⁴	— ⁴	2	2	2	2	2	2	2	2	14
Needlework ⁵	—	2	2	2	2	2	(2)	(2)	(2)	(2)	6(14)
Singing	2/2	2/2	2/2	2	2	2	2	2	2	2	14
Gymnastics	2/2	2/2	2/2	2	2	2	3	3	3	3	18
Total	18	22	22	31	31	31	31	31	31	31	217

Religion, German, French, English, history, geography, mathematics, and nature study are called scientific subjects; writing, drawing, needlework, singing, and gymnastics are called technical subjects.

¹ Instruction in religion and arithmetic in the *Vorschule* classes may be divided into half periods.

² In class VII German along with history stories.

³ In class VIII domestic art.

⁴ In classes X to VIII exercises in drawing and modeling are given occasionally in connection with German instruction.

⁵ Instruction in needlework is optional in the higher classes.

By comparing this curriculum with those for the *Gymnasium*, *Realgymnasium*, and *Oberrealschule* for boys,

it will be seen that the former falls short of the latter by two years. Until 1908 the Prussian state provided no school for girls which offered them an education equal to that available for boys. The additional training had to be secured, if at all, in private schools. The success of these private schools and the demand for larger educational opportunities for girls resulted in an imperial decree bearing date of August 15, 1908, according to which provision was made for establishment, by the state, of girls' higher schools corresponding to those already existing for boys. These new schools are to be formed by adding three years to the course previously prescribed for the higher *Mädchen*schule and by making certain modifications in the arrangement of the earlier work, beginning with the fifth year of the course in the case of the *Gymnasium* and with the sixth year in the case of the *Realgymnasium* and *Oberrealschule*. It remains to be seen how many of the previously established ten-year schools will become thirteen-year schools. The curricula for the three kinds of schools, beginning with the fourth year, are given below.¹ The work of the first three years, the *Vorschule*, is the same as that given in the curriculum for the higher *Mädchen*schule. These curricula correspond to those previously given for the *Gymnasium*, *Realgymnasium*, and *Oberrealschule* for boys,

¹ Bestimmungen über die Neuordnung des höheren *Mädchen*schulwesens in Preussen.

the apparent difference being due to a different way of designating the classes. The girls are given ten years to do the work done by the boys in nine years.

CURRICULUM OF GIRLS' GYMNASIUM¹

CLASS	X	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
Religion . . .	3	3	3	2	2	2	2	2	2	2	23
German ² . . .	6	5	5	4	3	3	3	3	3	3	38
Latin	—	—	—	—	6	6	6	6	6	6	36
Greek	—	—	—	—	—	—	8	8	8	8	32
French ³	6	5	5	4	3	3	2	2	2	2	34
English ⁴	—	—	—	4	3	3	—	—	—	—	10
History ⁴	—	2	2	2	2	2	2	2	2	2	18
Geography	2	2	2	2	1	1	1	1	1	1	14
Mathematics	3	3	3	3	4	4	3	3	3	3	32
Nature study	2	2	2	3	3	3	2	2	2	2	23
Writing	1	1	1	—	—	—	—	—	—	—	3
Drawing	2	2	2	2	2	2	—	—	—	—	12
Needlework	2	2	2	—	—	—	—	—	—	—	6
Singing	2	2	2	2	—	—	—	—	—	—	8
Gymnastics	2	2	2	3	3	3	3	3	3	3	27
Total	31	31	31	31	32	32	32	32	32	32	316

Optional, in addition, singing 1 hour from class VI on; drawing 2 hours from class IV on; needlework in VII.

¹The term *Studienanstalt* is used to include the *Gymnasium*, *Realgymnasium*, and *Oberrealschule* for girls.

²In the higher classes the elements of philosophy are taught along with German.

³In the four higher classes English may be substituted for French.

⁴In class IX German with history stories.

CURRICULUM OF GIRLS' *REALGYMNASIUM*

CLASS	X	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
Religion . .	3	3	3	2	2	2	2	2	2	2	23
German ¹ . .	6	5	5	4	3	3	3	3	3	3	38
Latin . .	—	—	—	—	6	6	6	6	6	6	36
French . .	6	5	5	4	3	3	3	3	3	3	38
English . .	—	—	—	4	3	3	3	3	3	3	22
History ² . .	—	2	2	2	2	2	2	2	2	2	18
Geography . .	2	2	2	2	1	1	1	1	1	1	14
Mathematics . .	3	3	3	3	4	4	4	4	4	4	36
Nature study . .	2	2	2	3	3	3	4	4	4	4	31
Writing . .	1	1	1	—	—	—	—	—	—	—	3
Drawing . .	2	2	2	2	2	2	2	2	2	2	20
Needlework . .	2	2	2	—	—	—	—	—	—	—	6
Singing . .	2	2	2	2	—	—	—	—	—	—	8
Gymnastics . .	2	2	2	3	3	3	3	3	3	3	27
Total . .	31	31	31	31	32	32	33	33	33	33	320

Optional, in addition, 1 hour of singing from class VI on.

¹ In the higher classes the elements of philosophy are taught along with German.

² In class IX German with history stories.

CURRICULUM OF GIRLS' *OBERREALSCHULE*

CLASS	X	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL
Religion . .	3	3	3	2	2	2	2	2	2	2	23
German ¹ . .	6	5	5	4	4	4	4	4	4	4	44
French . .	6	5	5	4	4	4	4	4	4	4	44
English . .	—	—	—	4	4	4	4	4	4	4	28
History ² . .	—	2	2	2	2	2	2	2	2	2	18
Geography . .	2	2	2	2	2	1	1	1	1	1	15
Mathematics . .	3	3	3	3	3	4	5	5	5	5	39
Nature study . .	2	2	2	3	3	4	4	4	4	4	32
Writing . .	1	1	1	—	—	—	—	—	—	—	3
Drawing . .	2	2	2	2	2	2	2	2	2	2	20
Needlework . .	2	2	2	—	—	—	—	—	—	—	6
Singing . .	2	2	2	2	2	—	—	—	—	—	10
Gymnastics . .	2	2	2	3	3	3	3	3	3	3	27
Total . .	31	31	31	31	31	30	31	31	31	31	309

Optional, in addition, 1 hour of singing from class V on; needlework 2 hours in VII and VI.

¹ In the higher classes the elements of philosophy are taught along with German.

² In class IX German with history stories.

Besides the higher *Mädcheneschule* and the *Gymnasium*, *Realgymnasium*, and *Oberrealschule* for girls, all of which are nonvocational general culture schools, there is another class called the *Lyzeum* that is distinctly vocational in character. The *Lyzeum* has two divisions, the *Frauenanstalt*, or school for women, and the *Lehrerinnenseminar*, or normal school for female teachers. The former has a two-yea course immediately following that of the higher *Mädcheneschule*, and the work, which consists largely of training in the household arts and the care of children, is designed to prepare girls for the duties of the home.

CURRICULUM OF LEHRERINNENSEMINAR

	III	II	I	TOTAL	PRACTICE YEAR
Religion	3	3	3	9	1
Pedagogy	2	2	2	6	3
German	3	3	3	9	1
French	4	4	4	12	
English	4	4	4	12	1
History	2	2	2	6	
Geography	2	1	1	4	
Mathematics	4	4	4	12	1
Nature study	2	3	3	8	1
Theory and method	—	—	(4 ¹)	—	4
Practice teaching	—	—	—	—	4-6
Special studies ²	—	—	—	—	8
Drawing	2	2	1	5	—
Singing	1	1	1	3	—
Gymnastics	3	3	3	9	3
	32	32	31	95	28-30

¹ Included in the study of particular subjects.

² A special study of subjects that the student will teach. In the practice year method is studied in connection with the different subjects.

The *Lehrerinnenseminar* is a school for the training of teachers, most of whom enter the elementary schools; some of them, however, are admitted to the girls' higher schools as nonacademically trained teachers. The curriculum of the *Lehrerinnenseminar*, as given above, presupposes the completion of the course in the higher *Mädcheneschule*.

This brief sketch of the Prussian schools shows in a general way the sphere of the teacher, especially of the teacher in the higher schools. It may be added that he has no responsibility for the making of curricula or for the selection of subject matter in any form. All of this is done for him by state authority, and specific instructions are given him as to how the various subjects should be taught. His task is sharply defined, and he is held responsible for its proper performance. The organization of the schools emphasizes the importance of good teaching quite as much as of scholarship. The teacher must learn to adapt himself and his work to the nine-year-old child as well as to the youth of eighteen or twenty. *Good teaching* is the one thing required of him.

The management of the schools mentioned is vested in two entirely separate ministries located in Berlin. The *Fortbildungsschulen* are under the direction of the ministry of trade and industry (*Handelsministerium*). The others are under the direction of the ministry of education (*geistliche, Unterrichts- und Medizinalange-*

legenheiten). Further, in the management of the *Volks-schule* and the *Mittelschule*, the ministry of education works through the county board (*Regierung*); in the management of the higher schools, through the provincial school board (*Provinzialschulkollegium*). Both of these subauthorities are responsible to the ministry of education, but they have very little to do with each other. This fact serves to emphasize the sharp separation between the elementary schools and the higher schools. Just as everything else in Germany, the schools are highly specialized.

CHAPTER II

THE CERTIFICATION OF TEACHERS IN PRUSSIAN HIGHER SCHOOLS

THE present high standard of qualifications legally required of teachers in the higher schools of Germany has a long history. It is the product of centuries of development, but its evolution during the last hundred years is particularly significant. The bare outlines of this history, together with a more complete statement of present requirements, are given in this chapter.

Before 1810 the legal qualifications of teachers for the Prussian higher schools were neither very definitely stated nor very strictly enforced. There are on record official regulations bearing date of 1713, 1718, 1750, and 1787, but their greatest significance lies in the fact that they represent an attempt to require certain more or less definitely stated qualifications in teachers without sufficient state control of the schools or adequate recognition of the teacher's position. Concerning these regulations, Wiese, the great historian of the Prussian higher schools, says: "From them no general and consequently effective provision arose, and before 1810 a certificate obtained by

examination cannot be regarded as a necessary requirement for admittance to the position of teacher in the higher schools. Such a certificate was seldom demanded by the patrons of the city schools. As long as the teachers were chiefly theologians, evidence of scientific training for the ministerial office was usually regarded as sufficient; in other cases the recommendation of an experienced man of rank or the teaching of a test lesson sufficed. The degree of Master or Doctor received from the university was valid as a certificate of admission to the teacher's office, as was also evidence of participation in the theological, philological, and pedagogical seminars connected with the universities."¹ The situation here described is the more easily understood when it is remembered that at this time the schools were neither supported nor controlled by the state but by the church or by private organizations of some kind, and most of the teachers were young theologians, who followed the work of teaching as a makeshift until they should be appointed to positions in the church. Not the state but the church was the dominating influence.

The Edict of 1810 was the result of the quickened national consciousness which, after the Napoleonic defeats, developed under the inspiring leadership of Fichte and his illustrious colleagues. In his *Addresses to the German People* the former pleaded for a higher ideal of intelli-

¹ Wiese, *Das höhere Schulwesen in Preussen*, I, 545.

gence and patriotism, while the latter both created new standards of culture and organized more effectively the national forces already in existence. As Chief of the Division for Culture and Instruction, William von Humboldt was the leading educational official of the nation, and he brought to the position, not only true patriotism, but great breadth of view and wealth of experience gained by years of study, both at home and abroad, of art, history, philology, and jurisprudence. He was at once a great scholar and an able official. To him, more than to any one else, is due the honor of sketching the official order the execution of which has made the schools of Germany great.

The edict was officially promulgated on July 12. In April of the same year von Humboldt wrote as follows: "The business of education in the state is honored if every one who is occupied therewith is first required to give evidence of his ability for it, and duly educates himself among those who devote themselves to this business and who, through public sanction, form at the same time a closed circle. Thus a spirit develops, which without being a tribal spirit is directed steadily and surely towards the attainment of a common end. There arises a pedagogical school and a pedagogical comradeship; and if it is important to prevent unity of views effected through compulsion, it is equally important, through a certain community which is never thinkable without the separation

of those not belonging to it, to produce a strength and enthusiasm which are always wanting in individual and scattered efforts, which separate the bad from them, raise and lead the average, and establish and hasten the progress of the best. This last and most important purpose can only be attained, however, when the examinations are undertaken with a certain satisfaction and are regarded as an opportunity to prove power.”¹

In the promulgation of the edict the accomplishment of three things was sought: 1. The release of the schools from the influence of teachers who received their appointment upon the recommendation of irresponsible and, too often, incompetent advisers. 2. The complete separation of the schools from the domination of the church. 3. The establishment of a standard of qualifications for teachers which would both secure efficiency in the schools and lead to the development of an independent profession of teaching. The avowed underlying principle was that the character and the importance of the work of the schools are such that it can only be satisfactorily done by those who have received special training for it and who devote their lives to it. For the work of the church a definite standard had already been established. A similar but entirely separate standard was now sought for the work of the school.

The provisions of the original edict were simple. The

¹ Wiese, *Das höhere Schulwesen in Preussen*, I, 546.

examination *pro facultate docendi* was to be conducted by a state commission appointed for the purpose. It consisted of three parts, the oral and the written tests and the trial lesson. The subject matter was mainly philological and mathematical, though other subjects to which the candidate had specially devoted himself were not excluded. Judgment concerning the extent of the examination and a satisfactory standard of attainment was left with the examining commission. Men who had received the degree of Doctor or Master from a German university and members of the various seminars attached to the universities were excused from the written examination. A special examination for a specified position, different from the general examination, was permitted. Desirable foreigners and prominent officials might be exempt. The provisions of the edict were to be enforced, beginning with the year 1813.

Changes in the provisions of the edict were made from time to time, the general effect of which was to render them both more specific and more extensive. Only the more important are noted in this sketch. In the first place, the subject matter of the examination was soon seen to be one-sided, and in 1824 philosophy, history, and theology were added. The single test lesson proved unsatisfactory, and in 1826 the *Probejahr* or year of trial teaching was introduced. Wiese gives the essential provisions prevailing in 1831 as follows:—

"The examinations which the royal scientific examination commission has to administer are: (1) the examination *pro facultate docendi*; (2) for a specified position; (3) for promotion; (4) for the position of rector.

"The examination *pro facultate docendi* refers to (a) languages (Greek, Latin, French, Hebrew); (b) sciences (mathematics, physics, natural history); history and geography (along with antiquities, mythology, and the history of Greek and Roman literature); philosophy and pedagogy; theology.

"With the application for the examination must be presented a certificate of proficiency in the university studies and of the completion of the academic triennium; also an autobiographical sketch in Latin. (In the case of those who wish to give instruction particularly in the sciences in *Realschulen* and higher *Bürgerschulen* this sketch may be written in French.) Foreigners need a ministerial permit to admit them to the examination.

"Form of the examination: written treatises, test lessons, and oral examination.

"Groups of subjects in which a *facultas docendi* can be secured: (a) the two ancient languages and German; (b) mathematics and the natural sciences; (c) geography and history.

"Grades of certificate: (a) unconditioned *facultas docendi*; (b) conditioned *facultas docendi*.

"The unconditioned *facultas docendi* shall be given to him only who, besides possessing satisfactory teaching ability, is so far master of the subject matter in at least one of the three essential parts of school instruction (that is, of the above subjects, *a*, *b*, *c*), that with proper preparation he can teach this subject with success in one of the two higher classes of a *Gymnasium*. With all the remaining subjects of the examination he must be well enough acquainted to estimate rightly their relation to the other subjects and their relative importance, and he must be able to use these successfully for the general education of the pupils.'

"Conditioned *facultas docendi*. — 'He who possesses sufficient

knowledge in the principal subjects to be able to instruct in the upper classes, but who, on the contrary, does not satisfy the requirements in one or in several subjects which must be demanded of every teacher in a higher school, can receive the *facultas docendi* only on condition that he make up afterwards the specified deficiencies in his scientific education. Further, the conditioned *facultas docendi* is to be given to all those candidates who, in one or in several of the principal subjects of instruction, possess only so much knowledge as is required of teachers in the middle and lower classes.'

"To special requirements belong the following: 'He who does not possess as much knowledge of the German language and literature and as much scientific education as are necessary to enable him to instruct with success in the German language in every class, including the highest, can lay no claim to the unconditioned *facultas docendi* in a philological subject.'

"In the case of French, a knowledge of the grammar and the ability to translate a poet or prose writer readily are to be required of every one, even when he gives no instruction in this language.'

"For the unconditioned *facultas docendi* in history it is also required 'that the candidate shall possess enough philological training so that he can use the Greek and Roman authors, not only for his lectures, but through these authors be able to contribute to an understanding of the lectures; and besides he must be so proficient in the oral expression of the Latin language that he is able to give his lectures in ancient history in that language.'

"*Philosophy and pedagogy.* — 'Of every candidate, even when he wishes to instruct in the lower classes only, is required a knowledge of logic, psychology, and the history of philosophy, as well as acquaintance with scientific pedagogy. Of the candidates who wish to instruct in the higher classes of the *Gymnasium* and to teach the preparatory philosophical studies arranged for these classes, it is required that, besides an accurate knowledge of the science of instruction and a critical estimate of the worth of differ-

ent systems of instruction and education, they be able to develop scientifically the content of logic, metaphysic, and psychology; and that with a general knowledge of the history of philosophy and of different philosophical systems, a more accurate acquaintance with philosophy since Kant be united.'

"Of those candidates who do not wish to give instruction in religion, acquaintance with the contents of the Holy Scriptures and knowledge of Christian faith and morality are required.

"Cost of certificate: four thalers.

"*Dispensation.* — He who has received the degree of Doctor or Master after a formal oral examination and after a public defence of a printed Latin dissertation before the philosophical faculty of a German university is excused from the written examination. . . .

"The candidates who are provisionally rejected on account of the insufficiency of their knowledge receive a certificate also, in which is stated the time up to which they may apply for another examination. Copies of certificates of this kind are to be sent to the other scientific examination commissions.

"The regulations concerning the *Probefahr* are taken up in the law (pp. 547 and 533). [A *Probefahr* for observation and practice was required.]

"In the examination of teachers for *Realschulen* and higher *Bürgerschulen*, the requirements in mathematics and the natural sciences, as well as those in history, geography, and French, should be raised rather than lowered, and the requirements in the Latin language should never be remitted entirely.

"The examination for a specified position as well as the examination for promotion takes place only when the candidate is chosen for a definite position; that is, has been promoted to a higher position for which he has not previously shown the required qualification. It refers only to those subjects in which the candidate is required to give instruction in the particular position.

"The examination for the position of rector is held only when the designation for a particular position as director occurs. The

purpose of this examination is to determine whether the person proposed for the directorate of a *Gymnasium* or a *Realschule* possesses the grade of philosophical, pedagogical, and scientific knowledge which is required to superintend the whole of such an institution of learning and to direct it systematically.”¹

The Examination Requirements of 1866 are sufficiently different from those of preceding years to mark a step in advance. The significant changes are as follows:—

1. In the order of 1831 there was no sharp distinction between the examination required to test the candidate’s general education and that required to test his knowledge of the subjects that he wished to teach. Examination was required in all the subjects named, but it might be less severe in those subjects which he did not expect to teach. In the order of 1866 all candidates were required to pass an oral examination in religion, in ‘philosophy and pedagogy, in history and geography, in the ancient languages, and in French. Examination in mathematics was not required in this general test, and examination in the natural sciences was required of those only who wished to become teachers of mathematics. On the other hand, a special examination both oral and written was required in those subjects for which the candidate desired the teaching certificate.

2. The written work of the examination was made more extensive and more definite. The candidate was required

¹ Wiese, *Das höhere Schulwesen in Preussen*, I, 548-549.

to present a carefully written discussion of some philosophical or pedagogical subject and one or two papers in the sphere of the subjects for which he desired to be certificated. The writing of these papers in Latin was required of those only who desired a certificate for the classical languages. Those who had received the degree of doctor of philosophy from the university were no longer excused from the written examination, but they might present the doctor's dissertation or some other particularly meritorious piece of writing in place of the special thesis required in this same sphere.

3. The grouping of the subjects was changed, and theology and the modern languages were added as principal subjects. The new arrangement included the philosophical-historical group; the mathematical-natural science group; theology; and the modern languages, the groups being regarded theoretically as equal in value.

4. The requirement concerning the test lesson was relaxed. It was left to the option of the candidate whether or not, at the close of his oral examination, he would give such an exercise.

5. The special examinations for a specified place, for promotion, and for the position of rector were practically omitted.

6. Three grades of certificates were issued instead of two as formerly. A certificate of the first grade was issued to a candidate who, in addition to a satisfactory general

examination, showed teaching proficiency in two or three principal subjects for the higher classes and like proficiency in one of two other subjects for the middle classes. A certificate of the second grade was given to a candidate who had failed in any one of the points required for the first grade, or who, besides giving satisfactory proof of a general education, had shown teaching proficiency in two or three subjects for the middle classes and like proficiency in some subjects for the lower classes. A third-grade certificate was issued to a candidate who had failed to satisfy the second-grade requirements with reference to the general examination or with reference to specific subjects which he wished to teach. In case the candidate showed incompetence to teach as far as *Quarta*, the third year of the course, no certificate was granted. A candidate who, besides having the required general education, showed proficiency in one or both of the modern languages for all classes was nevertheless debarred from the higher positions,—a fact which showed that the modern languages were not yet practically regarded as on a par with the other subjects. In a similar way theology was placed at a slight disadvantage, for candidates who wished to teach this subject could obtain a first-grade certificate only when, in addition to the general examination, they showed proficiency in German, theology, and Hebrew for all classes, and proficiency for the middle classes in either Latin and Greek or in mathe-

matics and the natural sciences. Candidates whose general examination in religion, philosophy, or history was not entirely satisfactory were sometimes temporarily certificated, but were required to prepare themselves for another examination in the deficient subject before they received permanent appointment. Both candidates and teachers were permitted to pass examinations for a higher-grade certificate as often as they desired to do so.

The Requirements of 1887 show the following changes:—

1. The general examination required of all candidates was limited to philosophy, pedagogy, the German language and literature, and the Christian religion. This limitation was made because it was recognized that the leaving examination of the higher school, required before the candidate could enter the university, was a considerable test of general culture, and preparation for a later examination in all subjects served to dissipate the candidate's energy.

2. The basis upon which certificates were granted was changed, and but two grades were recognized. A certificate of the first grade (*Oberlehrerzeugniss*) was granted to a candidate who, besides meeting the requirements of the general examination, showed proficiency in two principal subjects for all classes and proficiency in either one companion subject for the higher classes or in two companion subjects for the middle classes. A certificate of the second grade (*Lehrerzeugniss*) was granted to a candi-

date who showed proficiency in two principal subjects and one companion subject for the middle classes and in at least one companion subject for the lower classes.

3. The grouping and ranking of individual subjects showed slight modification. The modern foreign languages were placed with the ancient languages and German in one group and were regarded as principal subjects equal in value to any other. Geography, formerly united with some other subject, was made a principal subject. The two principal subjects for which the candidate wished to be certificated had to be chosen from the same group.

4. Provision was made for a supplementary examination. In case the candidate had passed satisfactorily the examination in the two principal subjects, but had failed to meet the requirements of the general examination or of the companion subjects, he was granted a "conditioned" certificate and placed under obligations to make up the deficiencies within three years at most. At first such a candidate was permitted to enter at once upon the year of trial service (*Probeyahr*), but in 1890 this privilege was withdrawn.

5. A candidate who had failed entirely in one examination was permitted but one more trial.

6. A candidate who had received a certificate of first or second grade was admitted to a second or third partial examination, either to extend his teaching right to higher

classes in a subject in which he already possessed it for the lower classes, or to extend it to other subjects.

7. Candidates for the ministry, who possessed the education required for appointment to a position in the church, might receive a first-grade certificate (*Oberlehrerzeugniss*) by passing an oral examination showing their ability to give instruction in religion in the higher classes and in one subject of the language-history group in the middle classes; and by passing an oral examination and presenting a thesis showing proficiency in Hebrew for the higher classes.

The Order of 1890 provided for the establishment of a *Seminarjahr*, a year of combined theoretical and practical training, between the time the candidate had passed his state examination and his entrance upon the *Probejahr* or year of trial service. The manner in which this order is carried out is described in full on later pages.

The Order of 1898 was concerned mainly with modifications looking towards a better administration of existing rules, and, with a few minor changes, it remains in force. For the reader who would understand the spirit and the details of German training the regulations contained in this order are so significant that they are given in full. The changes made since 1898 are incorporated in them.

examination *pro facultate docendi* was to be conducted by a state commission appointed for the purpose. It consisted of three parts, the oral and the written tests and the trial lesson. The subject matter was mainly philological and mathematical, though other subjects to which the candidate had specially devoted himself were not excluded. Judgment concerning the extent of the examination and a satisfactory standard of attainment was left with the examining commission. Men who had received the degree of Doctor or Master from a German university and members of the various seminars attached to the universities were excused from the written examination. A special examination for a specified position, different from the general examination, was permitted. Desirable foreigners and prominent officials might be exempt. The provisions of the edict were to be enforced, beginning with the year 1813.

Changes in the provisions of the edict were made from time to time, the general effect of which was to render them both more specific and more extensive. Only the more important are noted in this sketch. In the first place, the subject matter of the examination was soon seen to be one-sided, and in 1824 philosophy, history, and theology were added. The single test lesson proved unsatisfactory, and in 1826 the *Probejahr* or year of trial teaching was introduced. Wiese gives the essential provisions prevailing in 1831 as follows:—

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"The examination *pro facultate docendi* refers to (a) languages (Greek, Latin, French, Hebrew); (b) sciences (mathematics, physics, natural history); history and geography (along with antiquities, mythology, and the history of Greek and Roman literature); philosophy and pedagogy; theology.

"With the application for the examination must be presented a certificate of proficiency in the university studies and of the completion of the academic triennium; also an autobiographical sketch in Latin. (In the case of those who wish to give instruction particularly in the sciences in *Realschulen* and higher *Bürgerschulen* this sketch may be written in French.) Foreigners need a ministerial permit to admit them to the examination.

"Form of the examination: written treatises, test lessons, and oral examination.

"Groups of subjects in which a *facultas docendi* can be secured: (a) the two ancient languages and German; (b) mathematics and the natural sciences; (c) geography and history.

"Grades of certificate: (a) unconditioned *facultas docendi*; (b) conditioned *facultas docendi*.

"The unconditioned *facultas docendi* shall be given to him only who, besides possessing satisfactory teaching ability, is so far master of the subject matter in at least one of the three essential parts of school instruction (that is, of the above subjects, a, b, c), that with proper preparation he can teach this subject with success in one of the two higher classes of a *Gymnasium*. With all the remaining subjects of the examination he must be well enough acquainted to estimate rightly their relation to the other subjects and their relative importance, and he must be able to use these successfully for the general education of the pupils.'

"Conditioned *facultas docendi*. — 'He who possesses sufficient

**RULES¹ OF THE EXAMINATION FOR THE POSITION OF TEACHER IN
THE HIGHER SCHOOLS OF PRUSSIA, FROM SEPTEMBER 12, 1898²**

§ 1. *Purpose of the Examination*

The purpose of the examination is the determination of the scientific qualifications for the position of teacher in higher schools.

§ 2. *The Examining Authority*

The examination is given by one of the royal scientific examination commissions.

The minister of education (*der geistlichen, Unterrichts- und Medizinalangelegenheiten*) determines the place and the examination district of these commissions and names their members.

The commissions are composed for the most part of university instructors and schoolmen; the chairmanship is given to a schoolman.

The term of office of the commissions is one year.

¹ Translated from *Die Ordnungen für die Prüfung für die praktische Ausbildung und die Anstellung der Kandidaten des höheren Lehramts in Preussen*, by Dr. Wilhelm Fries. The author is under particular obligations to Dr. Fries for the privilege of using this material.

² The regulations given in this chapter apply to men teachers only. There are no women teachers in the boys' higher schools. In the girls' higher schools about seventy-five per cent of the teachers are women. Their scholastic training is not nearly equal to that required of men teachers. It consists usually of the girls' higher school course and a three-year seminar course. In 1908 the German universities were thrown open to women on equal terms with men, and beginning with the year 1913 women teachers entering the higher schools must have had university training and must have passed the state examination for higher teachers. No provision for the *Seminarjahr* and *Probeyahr* has yet been made, but it will probably come when there are university-trained women who wish to become teachers in the higher schools.

§ 3. *Examining Boards*

For the examination of individual candidates the chairman appoints from the members of the commission an examining board, the leadership of which he either assumes himself or assigns to another member.

The decisions of the board are made by majority vote. In case of a tie, the chairman casts the deciding vote.

§ 4. *Jurisdiction of the Commission*

1. Every commission is competent to hold the examination in whose examination district —
 - a. The university is situated in which the candidate spent the last and at least one earlier semester of his university course, or
 - b. The candidate expects to be employed, or is already employed, in public school service.
2. In case of the temporary overburdening of one commission, or for special reasons, the consideration of applications made to it may be assigned by the minister to another commission.
3. In order to make application to a commission which does not have jurisdiction, a candidate must present his reasons to the minister and secure his approval.
4. Candidates not belonging to the German Empire must, in every case, secure the approval of the minister for their application.

§ 5. *Conditions of Admission*

1. For admission to the examination it is required that the candidate shall have obtained the leaving certificate (*Reifezeugniss*) of a German *Gymnasium* or *Realgymnasium*, or of a Prussian *Oberrealschule* or of an *Oberrealschule* situated outside of Prussia, which is recognized as of equal rank; and that afterwards he shall have pursued his professional studies regularly at least six semesters in a German state university (§ 7, 2). With regard to the three

semesters' attendance at a *Prussian* university, refer to the cabinet order of June 30, 1841.¹

2. With regard to the provisions given under 1, in application for the teacher's certificate in mathematics, physics, and chemistry, regular study in a German technical university (*Hochschule*) is reckoned equal to study in a German university to the extent of three semesters.

3. A candidate who seeks the teacher's certificate in French or English and who has studied for some time in a foreign university with French or English lectures, or who has evidently devoted himself, in lands where these languages are spoken, to his linguistic education, along with scientific pursuits, can, with the approval of the minister, have this time reckoned, up to two semesters, as part of the prescribed period of study.

§ 6. *Application for Examination*

1. A written application for examination must be sent by the candidate to the chairman of the commission.

In the application it must be stated in what subjects (§ 9, 1, B) and for what classes (§ 11) the candidate expects to prove his qualifications, and in what fields he wishes to receive the subjects for the home essays in the general examination and in the special-subject examination.

2. With the application must be inclosed:—

a. A biographical sketch written in the candidate's own hand, in which is given the full name of the candidate, the position of his father, day and place of birth, and religious confession; the school training that he has had must be indicated, and the course and extent of his academic studies must be given in detail.

b. The originals of the certificates which show the fulfill-

¹ Except in special cases candidates are required to spend at least three semesters in a *Prussian* university.

ment of the conditions for admission to the examination (§ 5).

- c. A statement concerning military status.
- d. In case the application is made more than one year after leaving the university, an official statement concerning the manner in which the time has been spent.
- e. In case the candidate has already received the degree of Doctor of Philosophy, a copy of the Doctor's dissertation and of the Doctor's diploma.
- f. In case the candidate has published other writings or treatises, a copy of these.

3. With the application for another examination, or for an examination to extend the teaching right to higher classes or to additional subjects (*Wiederholungs-, Ergänzungs-, oder Erweiterungs-prüfung*) (§§ 37 and 38), a complete account must be given of all the earlier applications for examination and their result. If it should turn out, subsequently, that the candidate has concealed anything essential, the chairman of the commission is empowered, with the approval of the examining board, to withdraw the already granted permission to take the examination.

§ 7. Admission to the Examination

1. On the basis of the application the chairman of the commission decides whether the candidate is to be admitted to the examination or not.
2. Admission shall be denied if the conditions indicated in § 5 have not been fulfilled, and especially, if the candidate, as indicated by the certificates presented, has pursued his studies so unmethodically that they cannot be regarded as a proper preparation for his calling. In the examination of this question it is to be assumed that the candidate, as a rule and apart from special grounds for excuse, has taken part in the lectures and exercises essential for the study of his subjects, and that he has heard besides some lectures of a generally educative character.

Further, admission is to be denied if well-grounded doubts prevail with reference to the moral blamelessness of the candidate.

If admission is denied, the candidate can appeal within fourteen days to the decision of the minister.

If admission is finally denied, the chairman of the commission has to note the fact upon the academic leaving certificates.

3. If a candidate is admitted, he is assigned to an examination board. The chairman has to inform him of the fact and, at the same time, to communicate with him concerning the home theses of the examination, required according to § 28, 3 and 6, and § 40, 1.

§ 8. Extent and Form of the Examination

The examination consists of two parts: the general examination and the special-subject examination. Both are written and oral; the home theses are to be finished before the oral examination.

In the general examination as well as in the special-subject examination, the conditions of instruction in the higher schools are to be taken into account.

§ 9. Subjects of Examination

1. The subjects of the examination are:—

A. In the general examination, for every candidate, philosophy, pedagogy, and German literature; further, for those candidates who belong to the Christian church, religion.

B. In the special-subject examination according to the choice of the candidate: 1. The Christian religion; 2. introduction to philosophy; 3. German; 4. Latin; 5. Greek; 6. Hebrew; 7. French; 8. English; 9. history; 10. geography; 11. pure mathematics; 12. applied mathematics; 13. physics; 14. chemistry with mineralogy; 15. botany with zoölogy. To these are added, in the case of those commissions for

which examiners are appointed for the following subjects: 16. Polish; and 17. Danish.

The combinations of subjects, chemistry with mineralogy and botany with zoölogy, form only one subject in the examination.

2. The choice granted to the candidate according to 1, B, is limited by the condition that, among the subjects indicated by him, there must always be one of the following combinations: Latin and Greek; French and English or Latin; history and geography; religion and Hebrew or Greek; pure mathematics and physics; chemistry with mineralogy and physics, or, instead of physics, botany and zoölogy; with the provision, however, that in place of each subject named in the first three combinations and in place of Hebrew in the fourth, German may be substituted.

3. The candidate is not prohibited from choosing a greater number of subjects than is required, according to § 34, 1, for undertaking the examination.

4. Applied mathematics can be chosen only in connection with pure mathematics.

§ 10. Extent of the Requirements in the General Examination

The general examination does not aim at the presentation of professional knowledge, but at evidence of a general education in the spheres concerned, which is required of teachers of higher schools.

Accordingly the candidate, in the thesis required of him according to § 28, 1, has to manifest not merely adequate information and intelligent judgment concerning the subject treated, but also to show that he is capable of a grammatically correct, logically arranged, clear, and sufficiently skillful presentation.

For the oral examination it is required that the candidate —

1. In religion show himself acquainted with the content and connection of the Holy Scriptures, have a general survey of the history of the Christian church, and know the principal doctrines of his confession.

2. In philosophy be acquainted with the most important facts of its history and with the principles of logic and psychology, and shall have read an important philosophical treatise with understanding.

3. In pedagogy show that he is acquainted with its philosophical foundations as well as with the most important phenomena in their development since the sixteenth century, and has already attained some understanding of the problems of his future calling.

4. In German literature demonstrate that he is acquainted with its general course of development since the beginning of its blossoming period in the eighteenth century, and that since leaving the school he has also read with understanding for his own further education the important works of this time.

Candidates who successfully pass the special-subject examination in religion, introduction to philosophy, or German are excused from the general examination in the same subject.

§ 11 to § 27. Extent of Requirements in the Special-subject Examination

Preliminary Remark.—In every part of the examination acquaintance with the most important scientific means of illustration [apparatus, maps, books, etc.] is required.

§ 11. Gradation in Certification

1. Certification in the individual subjects has two grades: one (second grade), for the lower and middle classes, extends to *Untersecunda* inclusive; the other (first grade) includes also the higher classes to *Oberprima* inclusive.

2. In introduction to philosophy, in Hebrew, and in applied mathematics, on account of their position in the program of studies, only certification of first grade is granted.

For botany and zoölogy, which do not constitute a special subject of instruction in the higher classes, first grade signifies that the

candidate has demonstrated thorough scientific knowledge in this subject (compare § 9, 1, *B*).

3. It is presupposed in every case that the requirements for a first-grade certificate are at least equal to those required for the second grade in the subject concerned.

§ 12. *Religion*

A. Of candidates who desire to qualify for instruction in evangelical religion, there is required:—

a. For second grade: familiarity with the biblical history of the Old and particularly of the New Testament on the basis of a thorough study of the Holy Scriptures; general biblical knowledge and acquaintance with biblical antiquities; knowledge of the history of the early church in the first centuries and history of the Reformation; understanding of the institutions of the evangelical church and its doctrines according to the fundamental writings, especially the Heidelberg catechism and the Augsburg confession of Luther, and particularly also, familiarity with their characteristic features; acquaintance with the order of the church year as well as with the evangelical psalms and the liturgy.

b. For the first grade, in addition: the ability, gained by the study of an introduction to theology (*Einleitungswissenschaft*), of biblical theology, and of scientific exegesis, to explain the Holy Scriptures and especially the New Testament in the original; an acquaintance, resting upon a survey of the historical development of the church, with the present evangelical church with reference to its creed and constitution in distinction from other religious societies; knowledge of its faith and customs, especially with reference to their historical development, and the ability to show their biblical foundation and to present them simply and clearly.

B. Of candidates who wish to qualify for instruction in the Catholic religion, there is required:—

- a. *For second grade*: familiarity with the biblical history of the Old and especially of the New Testament; biblical knowledge and acquaintance with the sacred antiquities of the people of Israel; thorough knowledge of the most important periods of church history; familiarity with the teachings of the Catholic faith and customs as they are given in the Roman catechism; a thorough understanding of the church year, which qualifies for the instruction of pupils in the spirit of the individual festival periods.
- b. *For first grade*, in addition: the ability gained through the study of introduction to theology, as well as of biblical history and theology, to explain suggested portions of the New Testament according to the original; the ability to discuss simply and clearly questions of faith and customs with reference to the positive and apologetic foundation of the Catholic teaching; knowledge of the history of the Catholic church and of the development of its teaching in distinction from other churches and religious communities, and the ability to present the significance of the authoritative facts and personalities in the whole development of the Christian church.

§ 13. *Philosophische Propädeutik* [an elementary course in philosophy]

Of candidates who wish to secure certification in *Philosophische Propädeutik* it is required that they meet in a thoroughly satisfactory manner the conditions set for the general examination in philosophical training (§ 10), especially in the home essay, the subject of which, for these candidates, must be chosen from the sphere

of philosophy; and, further, that, along with a general survey of the history of philosophy and of the problems of its principal divisions, they possess thorough knowledge of at least one of these problems or of one of the most important philosophical systems; and that they show the ability to comprehend philosophical questions clearly and definitely.

§ 14. *German*

Of candidates who wish to qualify for instruction in German, there is required:—

- a. For second grade*: thorough knowledge of the elements of new High German grammar, and acquaintance with the history of the new High German written language; thorough knowledge of the classical works of the newer literature, especially in the fields applicable to the training of youth, and a survey of the course of development of new High German literature; acquaintance with the outlines of rhetoric, poetics, and metrics, as well as with the old German legends important for the school.
- b. For first grade*, in addition: a mastery of Middle High German which qualifies for reading the easier works without difficulty and for explaining them with grammatical and lexical accuracy; a knowledge of the course of development of German literature as a whole, at least for the Middle High German and newer period, based upon extended reading; familiarity with poetics and German metrics, as well as with those principles of rhetoric a knowledge of which is necessary for instruction in the preparation of German essays in the higher classes; in addition, according to the choice of the candidate, *either* acquaintance with the principal results of historical grammar and knowledge of the elements of Gothic and Old High German, *or* certification in introduction to philosophy (§ 13).

§ 15. *Latin and Greek*

Of candidates who wish to secure certification in Latin and Greek are required:—

For second grade: thorough knowledge of Latin and Greek grammar and practice in the written use of both languages to the extent of readiness in translating suitable exercises with grammatical correctness and, at least as far as Latin is concerned, without notable defects in style; the ability, gained from a systematic and thorough reading of the classics, to understand extracts from the writings of authors suitable for *Secunda* in the *Gymnasia*, with grammatical and lexical accuracy, and except in places of special difficulty, to translate fluently. Candidates must be so well acquainted with Greek and Roman history, including the history of literature, with antiquities, mythology, and metrics, that they can give the essential explanations of school authors for middle classes, and use good sources intelligently when preparing lessons.

For the first grade, in addition: a connected, well-founded knowledge of Latin and Greek grammar; facility in the written use of Latin; grammatical certainty in writing Greek, besides some practice in speaking Latin; considerable knowledge of the Greek and Roman classics, especially of those within the range of reading for *Gymnasia*, along with scientific training in the method of explanation; familiarity with metrics as far as the poets to be read in *Gymnasia* are concerned, besides some practice in the proper recitation of verses; knowledge of the development of Greek and Roman literature, especially of the classical period; a scientific knowledge of the chief periods of Roman and Greek history, state institutions, private life, religion, mythology, and the philosophy of the Greeks and Romans; understanding of archaeology as far as it is necessary to make the lessons more interesting, through proper choice of means of illustration. Candidates must furthermore show familiarity with the development of philology.

§ 16. *Hebrew*

Of candidates who wish to qualify for instruction in Hebrew, there is required a scientific, coherent knowledge of the Hebrew etymology and grammar, and familiarity, founded on individual readings, with a large part of the historic, poetic, and prophetic scriptures of the Old Testament; ability to understand and to translate with grammatical and lexical exactitude a passage not too difficult from the Old Testament written in a text marked with points; knowledge of the chief points of the history of the people of Israel and of the Old Testament. Proper emphasis should be attached to the right form and legibility of the Hebrew handwriting (§ 29).

§ 17. *French*

Of candidates who wish to qualify for instruction in French, there is required a knowledge of elementary Latin grammar, in addition to ability to understand and to translate at least easy passages from school authors, such as Cæsar. Furthermore:—

For the second grade: knowledge of the elements of phonetics, a thorough mastery of correct pronunciation, familiarity with etymology, syntax, and synonyms, mastery of a sufficient fund of words and idioms, and some experience in the actual use of the spoken language; general understanding of the metrical structure of modern French verses, and a survey of the development of French literature since the seventeenth century; acquaintance with the most important works of the most prominent poets and prose writers; ability to translate ordinary writers into good German, and to make reproductions in the foreign language free from errors in grammar and style.

For the first grade, in addition: in the written and oral use of the language, not only absolute grammatical certainty along with scientific justification of this grammatical knowledge, but also familiarity with a larger vocabulary and more idioms of the language, as well as sufficient ability to apply them for all educa-

tional purposes; a thorough knowledge of the historical development of the language since its separation from the Latin; a good knowledge of the general development of French literature in connection with detailed readings of several prominent literary works from earlier periods and the present time; insight into the laws of French metrical structure of ancient and modern times, and knowledge of the history of France as far as it is required for the appropriate explanation of ordinary school authors.

NOTE. — An especially thorough knowledge of modern literature and a superior command of the modern language may compensate for a less thorough knowledge of the historical development of the language.

§ 18. *English*

Of candidates who wish to qualify for instruction in English, there is required a knowledge of elementary Latin grammar, in addition to ability to understand and to translate at least easy passages from school authors, such as Cæsar. Furthermore: —

For the second grade: knowledge of the elements of phonetics and a thorough mastery of correct pronunciation, familiarity with etymology, syntax, and synonyms; mastery of a sufficient fund of words and idioms, and some experience in the actual use of the spoken language; a survey of the development of English literature since Shakespeare; thorough acquaintance with some of the most important works of the most prominent poets and prose writers; ability to translate ordinary writers into good German, and to make reproductions in the foreign language free from errors in grammar and style.

For the first grade, in addition: in the written and oral use of the language, not only absolute grammatical confidence along with scientific justification of this knowledge, but also familiarity with a larger vocabulary and more idioms of the language, as well as a sufficient ability to apply them for all educational purposes; a thorough insight into the historical development of the lan-

guage since the old English period; knowledge of the development of literature in connection with extensive readings of several literary works from earlier periods and modern times; understanding of the laws of English metrical structure from ancient and modern times, and knowledge of England's history as far as it is required for the appropriate explanation of the ordinary school authors.

NOTE. — An especially thorough knowledge of modern literature and a superior command of the modern language may compensate for a less thorough knowledge of the historical development of the language.

§ 19. *History*

Of candidates who wish to qualify for instruction in history, there is required knowledge of Latin and Greek as far as they are necessary for the understanding of the historical sources written in these languages. Furthermore: —

For the second grade: a complete survey, founded on systematic geographical and chronological knowledge, of events related to universal history, especially of Greece and Rome, Germany and Prussia; acquaintance with the development of the Constitution in Sparta, Athens, and Rome, and particularly in Germany and Prussia; a comprehensive understanding of the Prussian state and of the German imperial constitution, and familiarity with some of the most important works on national history.

For the first grade, in addition: a more exact knowledge of the course of development of universal history and understanding of the relations and internal connections of events; evidence of a more thorough knowledge of the history of constitutions and civilizations, — in antiquity, with reference to the Roman-Greek history, in the Middle Ages and modern times, with reference to the national history; knowledge and understanding of the most important industrial and social changes since the end of the Thirty Years War; familiarity with the most important historical sources for the chief topics to be studied, and with the principles

of their use as well as with the literary sources of the science of history and with important modern historical works.

§ 20. *Geography*

Of candidates who wish to qualify for instruction in geography, there is required:—

For the second grade: a thorough knowledge of the fundamental laws of physical, mathematical, and political geography, and of physiography; a broad knowledge of the history of discoveries and of the most important tendencies of world commerce in different periods, and especially of the development of the German colonies; familiarity with the use of the globe, reliefs, and maps; ability to explain the fundamental facts of mathematical geography by means of simple illustrative material, and some facility in map drawing.

For the first grade, in addition: familiarity with the principles of mathematical geography and, as far as they can be proved by elementary mathematics, with their proofs also; knowledge of the physical, and the most important geological relations of physiography; connected knowledge of the political geography of the present time; survey of the development of the civilized nations, geographically considered; and acquaintance with the chief facts of ethnology.

§ 21. *Pure Mathematics*

Of candidates who wish to qualify for instruction in mathematics, there is required:—

For the second grade: a thorough knowledge of elementary mathematics and familiarity with analytical geometry of planes, especially with the principal properties of conic sections as well as with the fundamental principles of differential and integral calculus.

For the first grade, in addition: such an acquaintance with the principles of higher geometry, arithmetic, and algebra, of higher

analysis and analytical mechanics, that the candidate can solve a fairly difficult problem in this field without assistance.

§ 22. *Applied Mathematics*

Of candidates who wish to qualify for instruction in applied mathematics, there is required in addition to a certificate in pure mathematics: knowledge of descriptive geometry including the principles of central projection, and corresponding facility in drawing; familiarity with the mathematical methods of technical mechanics, especially with graphical statics, with elementary surveying and the elements of advanced surveying, and with the theory of adjustment of errors in observation.

§ 23. *Physics*

Of candidates who wish to qualify for instruction in physics, there is required:—

For the second grade: knowledge of the more important phenomena and laws of the whole sphere of this science, as well as the ability to prove these laws mathematically as far as this is possible without the application of higher mathematics; acquaintance with the apparatus required for school instruction and practice in its use.

For the first grade, in addition: a more exact knowledge of experimental physics and its applications; familiarity with the fundamental investigations in one of the more important fields of theoretical physics, and a general survey of the whole sphere of this science.

§ 24. *Chemistry and Mineralogy*

Of candidates who wish to qualify for instruction in chemistry and mineralogy, there is required:—

For the second grade: knowledge of the laws of chemical combinations and of the most important theories of their constitution; familiarity with the separation, properties, and inorganic combinations of the more important elements with their significance

in the economy of nature and with the most important facts in chemical technology; practice in experimenting; knowledge of the most common minerals in regard to their crystalline form, their physical and chemical properties, and their practical use, as well as with the most important mountain ranges and geological formations, especially with those of Germany.

For the first grade, in addition: a more thorough knowledge of inorganic chemistry and of those combinations within the range of organic chemistry which are of greater significance for physiological or technical use, as well as familiarity with the most important chemical methods and theories; facility in qualitative analysis and sufficient practice in quantitative analysis, including elementary analysis of organic materials.

§ 25. *Botany and Zoölogy*

Of candidates who wish to qualify for instruction in botany and zoölogy, there is required:—

For the second grade: knowledge gained through personal observation of the more common home plants, and of local animals, and those of particularly characteristic forms from foreign countries; knowledge of anatomy and the fundamental laws of the physiology of the human body, with special reference to hygiene; a survey of the classification of the plant and animal kingdoms; knowledge of the most important natural families and of some representatives of the lower plant world, as well as of the most important classes of the vertebrates and articulate animals, also of some representatives of the rest of the animal kingdom and their geographical distribution; familiarity with the fundamental principles of anatomy, physiology, and biology of plants, and knowledge of the structure and the life of animals, also some practice in drawing animal and plant forms.

For the first grade, in addition: a greater familiarity with the principles of anatomy, physiology, and biology of plants and animals, as well as with the classifications of the animal and plant

kingdoms; a more thorough knowledge of the anatomy and physiology of man.

NOTE. — The certificate to teach botany and zoölogy may be given for the first grade (in the sense of § 34, 1), even if the candidate has the teaching license in only one of the two subjects for the first grade, and in the other subject for the second grade.

§ 26. *Polish*

Of candidates who wish to qualify for instruction in Polish, there is required: —

For the second grade: certainty in the grammar of the modern Polish language; knowledge of the course of development of Polish literature, and familiarity gained through personal reading with the most prominent literary productions, especially with those from the sixteenth century on; ability to write modern Polish correctly; and facility in conducting conversation lessons.

For the first grade, in addition: more extensive reading and acquaintance, founded on the most important facts of old Slovenian phonetics and syntax, with the course of development of Polish phonetics and syntax and familiarity with the formation and significance of modern Polish words.

§ 27. *Danish*

Of candidates who wish to qualify for instruction in Danish, there is required: —

For the second grade: knowledge and grammatical understanding of that form of the Danish language which educated Danish people of the present use in conversation and writing; ability to speak and write the Danish language, on the whole, correctly; a more thorough knowledge of the Danish literature since Holberg, founded on personal reading and familiarity with the so-called *Provindslove* and *Kaempeviser* (*Folkeviser*) of the older times.

For the first grade, in addition: such knowledge of the relation of the Danish language to German (High and Low German) as is

necessary for the scientific understanding of the present form of the Danish language.

§ 28. *Theses (Schriftliche Hausarbeiten)*

1. The candidate receives two theses for preparation at home: one in a subject required for the general examination (§ 10) and the other in a subject for which the candidate seeks a certificate of the first grade. Special wishes of the candidates concerning the choice of the theses (§ 6, 1) are to be respected as far as possible.

2. Examination papers in the domain of classical philology must be written in Latin; those from modern languages in the language concerned, and all others must be written in German.

3. A limit of sixteen weeks, beginning with the day of delivery of the themes, is granted to finish both theses. At the expiration of that term at the latest a fair copy of these theses must be presented to the chairman of the examination committee. The committee can grant an extension of that term up to sixteen weeks, if a plausible excuse is given at least a week before the expiration of the term. The application for another prolongation of the time must be made in due time to the chairman of the examination committee and needs the approval of the minister.

If the candidate neglects to hand in his papers, he is considered not to have passed the examination. If, however, afterwards valid reasons for his failure can be given to the chairman of the examination committee, he is excused, and new thesis subjects are given him.

4. After having finished each thesis, the candidate must declare that he has prepared it alone, and that he has used no other helps than those quoted by him. The same declaration must be given in regard to the drawings handed in (§ 30, 2). If it is proved that this declaration is not true, the examination is considered a failure; if only after delivery of the certificate it is discovered that the declaration was not true, disciplinary measures are used.

5. The chairman of the examination committee appoints the

members, who are responsible for the criticisms of the individual examination papers.

6. A dissertation (§ 6, 2, e and f) written by the candidate, to which the regulations under 4 would have to be applied, can, upon request, be used as one of the two theses. After having spoken with the candidate concerning the subject, to which the regulations under 2 would apply, the chairman of the examination committee decides such a request.

If a Prussian faculty of philosophy has recognized the dissertation presented as sufficient for the attainment of the degree of Doctor of Philosophy, there still remains the question whether this dissertation can be considered with reference to its content as equivalent to a thesis.

7. A thesis may not be used for the attainment of the degree of Doctor of Philosophy or for publication until the examination is finished and the certificate has been delivered. All theses are to remain with the documents of the commission, but the authors can have copies made at their own expense.

§ 29. *Examination Papers (Klausurarbeiten)*

The board of examiners may ask the candidate to prepare in a comparatively short time (three hours at most) an examination paper on any subject of the special examination. For foreign languages the preparation of such papers is, as a rule, obligatory.

§ 30. *Evidence of Practical Ability*

1. Acquaintance with the most important apparatus and its manipulation (§ 23) must be proved through performance of several of the easier experiments; practice in chemical experiments (§ 24), through performance of an analysis, unless the official certificates give evidence of the necessary practice. Practice in the manipulation of geographical means of illustration has to be proved in the same way.

2. In order to show ability in map drawing (§ 20), in geometri-

cal drawing (§ 22), and in simple drawing of animal and plant forms (§ 25), candidates who wish to qualify in these subjects must present with their theses drawings made entirely by themselves (see § 28, 4).

§ 31. *Withdrawal from the Oral Examination*

1. If the theses (§ 28 and § 29) of a candidate leave no doubt whatever that even in case of a very favorable result of the oral examination the candidate could not even be admitted to a supplementary examination (§ 34, 2), the examination committee is free to refuse to admit him to the oral examination and to declare the examination a failure. Under such circumstances they still have this right, even if the candidate himself wishes to withdraw from the examination.

2. Admission to the oral examination is not to be given if subsequently valid doubts as to the candidate's moral conduct have arisen (§ 7, 2). The chairman of the examination committee is competent to decide such a case.

§ 32. *Summons to the Oral Examination*

1. The summons of the candidate to the oral examination and the inquiries (§ 29 and § 30) connected with this examination must be communicated in writing by the chairman of the examination committee.

2. If the candidate neglects the appointed date, he is considered not to have passed the examination. If, however, valid reasons for his nonappearance can afterwards be given to the chairman of the board of examiners, he is excused, and a new time for the oral examination must be appointed.

§ 33. *Conduct of the Oral Examination*

1. The order of succession of the parts of the oral examination, including the requirements (§ 29 and § 30) connected with it, is fixed by the chairman of the board of examiners.

Upon a special request of the candidate, to be handed in with the theses, the chairman of the committee can separate the general examination and the subject examination within a summer semester or a winter semester, so that there is at most three months between them.

It is to be especially noted, however, that the result of such a subject examination can be communicated orally to the candidate as soon as it is finished, but that a certificate can in no case be given before the close of the general examination (§ 35).

2. At the general examination as well as at every subject examination at least three members of the committee, including the chairman, must, as a rule, be present. Unavoidable exceptions must be mentioned in the minutes; the presence of two members is, however, absolutely necessary.

3. In the general examination not more than four candidates, in the subject examination not more than two candidates, may, as a rule, be admitted together.

4. It is not permitted to distribute the different phases of one subject among several examiners; on the contrary, it is recommended, where possible, to assign the examination in closely related subjects (see § 9, 2) to one person.

5. The special examination in French, English, Polish, or Danish is to be conducted in part in the language concerned, so that the facility of the candidate in its oral use can be shown.

6. During the examination minutes of the general examination and of the examination in special subjects must be made and signed by the members of the committee who are present. The minutes remain with the documents of the commission.

7. The result of the general examination must be determined for every candidate according to his theses and the work done by him in the oral examination, if necessary, through a majority vote of the members of the committee; slight mistakes in one part of the examination can be offset by good work done in other parts, and the general impression of the work done by the candidate

has to be taken into consideration; if the votes are even, the chairman decides the matter. At the close of the minutes of the general examination it must be stated whether the candidate has passed the examination or not. If the work done by the candidate is very much better than is required in the general examination, the committee can certificate him for instruction in the subject concerned.

Immediately after each subject examination the examiner must, on the basis of the answers given by the candidate, state his opinion in the minutes whether the certificate can be given and for which of the two grades (§ 11). The examiner is permitted to justify his opinion, and the other members of the committee who were present at the examination are also permitted to express a dissenting judgment. The candidate may be certificated to instruct in the first grade, though in his application he intended to qualify only for the second grade.

8. If the candidate withdraws during the oral examination, the committee has to decide whether the examination is a failure or whether a new date can be assigned him.

§ 34. *The General Result of the Examination*

At the close of the entire examination, the examination committee must decide on the basis of the judgment recorded in the minutes, the result of the general examination and of the subject examination, whether the candidate has passed the examination or not.

1. The candidate has passed the examination if his general examination was satisfactory and if he qualified in at least one of the subjects named in § 9, 1, B, 1-15 for the first grade and in two more subjects for the second grade; consult § 9, 2 on the required combination of subjects.

If the candidate has passed the examination, the examination committee has to decide whether, according to the entire result of

the written and oral examination, the certificate is to be marked satisfactory, good, or excellent. If the certificate is to be marked satisfactory, good, or excellent, the candidate must have qualified in at least two of the subjects quoted under § 9, 1, B, 1-15 for the first grade; if, however, the examination in the introduction to philosophy has served to qualify the candidate for German, it may not be counted again (§ 14, b).

2. If the examination has not been passed or has been considered equal to a failure, the examination committee has to decide whether another examination is permitted (§ 37), and whether a repetition of the entire examination (*Wiederholungsprüfung*) or only a supplementary examination (*Ergänzungsprüfung*) is necessary.

The examination committee must determine the time before the expiration of which the examinations (*Wiederholungs- oder Ergänzungsprüfung*) must take place.

§ 35. *Certificate*

A certificate of the result of the examination must be given to the candidate in any case, whether he has passed the examination or not, or whether the examination has been considered equal to a failure.

In the certificate the full name of the candidate, the occupation and the home of his father, day and place of birth, confession, and the course of education must be given; it must be especially stated where and when the candidate passed the leaving examination (*Reifeprüfung*), at what universities he studied and how long at each, when he applied for admission to the examination, and when he finished it; if the candidate has served in the army, when and where he served must be stated.

The report on the candidate's theses or on the dissertation which has been considered the equivalent must be added also (§ 28, 6), and:—

1. If the examination has been passed, the statement regarding it according to § 34, 1, without reasons for the result, but with the exact statement of the subject and the grade for which the candidate has qualified.
2. If the examination has not been passed, the report concerning it, according to § 34, 2, must be stated; the time must also be stated within which the application for the second examination or for the supplementary examination has to be made; for the supplementary examination, on the one hand, the parts of the examination in which the candidate has satisfied the requirements, as in 1, and, on the other hand, the parts of the examination for which the candidate has to pass a supplementary examination, have to be accurately stated.
3. If the examination has been considered equal to a failure, the reasons therefor have to be stated also according to § 28, 3 and 4; § 31, 1; § 32, 2; § 33, 8.

§ 36. *Note on Academic Certificates*

In returning the academic certificates (§ 6, 2, b) to the candidate, the chairman of the commission must briefly state upon them the result of the application and the examination.

§ 37. *Second Examination and Supplementary Examination*

1. The same commission before which the first examination was passed is competent for the second examination as well as for the supplementary examination (§ 34, 2). Admission to one of these examinations before another commission can only be granted exceptionally and needs the approval of the minister.
2. The application for a second examination or a supplementary examination must be made at the latest within two years after delivery of the certificate of the preceding examination. If the second examination or the supplementary examination is a failure or is considered equal to a failure, another examination can only be permitted with the approval of the minister.

3. In every case a certificate concerning the result of the second examination or the supplementary examination has to be given, in which reference should be made to the certificate which the candidate has already won. If the examination was passed, the regulations under § 35, 1 concerning certification are to be applied.

§ 38. *Extension Examination*

1. Any one who has passed the examination for the position of a teacher for higher schools can within the six following years apply for an extension examination either to qualify for instruction in other subjects, or to extend the certification already granted in order to raise the final standard of the certificate, if the royal provincial school board (*Königliches Provinzial Schulkollegium*) in whose district the person concerned is already occupied or will soon be occupied in the service of the school, recommends admission to such an examination.

2. The commission before which the candidate formerly passed the examination for the higher schools and the commission of the advising royal provincial school board are responsible for the extension examination.

3. In each of the two cases quoted under 1, an extension examination can be tried only once.

4. As to the certificate to be given, the regulations stated under § 37, 3 and § 34, 1 are to be rationally applied.

§ 39. *Special Regulations for Clergymen and for Candidates in Theology*

Candidates for the ministerial office and clergymen of one of the Christian churches who have passed the examinations for the ministry obtain a certificate for instruction in higher schools if they can prove in an oral examination their qualification for instruction in religion for the first grade, and if they can prove furthermore through a thesis and an oral examination the qualification for

instruction in Hebrew (§ 16) and in one of the subjects quoted under § 9, 1, B, under 2 to 5, 7 to 11, and 13 to 15. If the candidate wishes to qualify for instruction in the first grade in another subject besides religion and Hebrew, a thesis on the subject concerned is required (§ 28).

In granting the certificate the regulations in § 35 must be rationally applied.

§ 40. *Fees*

1. Fees are to be paid immediately after admission to the examination to the treasurer indicated by the chairman of the commission.

If a candidate proves through valid certificates that he has been obliged through illness or other exceptional difficulties to abandon the examination which he has begun, the fees will be returned. In all other cases they remain in the official treasury whether the examination has been finished or not.

2. Exclusive of the stamp to be placed on the certificate, the fees amount to 60 marks for the entire examination, 30 marks for the second examination or the supplementary examination, and also for those mentioned in § 39. In case of the division of the examination into two parts, permitted according to § 33, 1, a special fee of 30 marks has to be paid in addition to the fees of 60 marks for the entire examination.

§ 41. *When do these Examination Regulations become Effective?*

The present examination regulations for instruction in higher schools and the decrees issued to supplement or to change these regulations become effective on April 1, 1899, after nullification of the regulations of February 5, 1887, for instruction in higher schools.

§ 42. *Transitionary Regulations*

The applications coming in before April, 1899, must be treated according to the old examination regulations unless the use of the new regulation is particularly requested.

The extension of a certificate granted conditionally according to the old regulations must take place according to the requirements of the old regulations. If the certificate has been delivered before April, 1899, the application for the supplementary examination must be made before April 1, 1901; if the certificate has been delivered after April 1, 1899, the time for the application is limited to two years from the day of the delivery of the certificate.

The extension of a certificate granted unconditionally according to the old regulations must follow the new regulations after April 1, 1899. If the certificate has been delivered before April 1, 1899, the application for an extension examination can be made up to April 1, 1905; if it has been delivered after April 1, 1899, the time for application is extended over six years from the day of the delivery of the certificate.

REGULATIONS FOR THE PRACTICAL TRAINING OF CANDIDATES
FOR THE POSITION OF TEACHER IN HIGHER SCHOOLS IN
PRUSSIA, FROM MARCH 15, 1908

§ 1

In order to obtain certification for teaching in higher schools, the candidates must be trained practically for their future profession after having passed the scientific examination. This training is carried out under the guidance of capable educators and under the supervision of the Royal Provincial School Board.

§ 2

The practical training lasts two years and consists of the *Seminarjahr* and the *Probejahr* following.

A. During the *Seminarjahr* the candidates must acquaint themselves with the theory of education and the theory of teaching in their application to higher schools, and with the methods of instruction in individual subjects; they must also be trained for their practical work as teachers and educators.

B. The *Probejahr* is organized especially for the independent demonstration of the teaching ability attained in the *Seminarjahr*; it should, as a rule, be passed in those schools which have not been used for the work of the *Seminarjahr*.

A. The Seminarjahr

§ 3

Sometime before the beginning of a summer or a winter semester candidates must apply to the provincial school board in whose district they want to pass the *Seminarjahr*. With the application for admission must be sent:—

1. The original of the certificate or the preliminary certificate concerning the scientific or subject examination already passed.
2. A certificate from an official physician attesting that the candidate has the necessary health and the physical qualifications for the profession of a teacher; especially that he has no perceptible tendencies to chronic diseases as well as no defects of speech, and that his sight and hearing are sufficient.
3. A statement concerning his financial condition and the availability of the means necessary to provide for his support during the period of practical training.
4. A statement concerning his military status.

The minister may assign the candidate to another district.

§ 4

The assignment of candidates is made twice a year, at Easter, and in the autumn, by the provincial school board, to seminars in which the school year begins at these times. The assignment is primarily determined by the subjects which the candidate is prepared to teach.

Not more than six candidates may be assigned yearly to any seminar by the provincial school board. In their distribution the teaching subjects of the candidates as well as the specialties

of the different seminars have to be taken into consideration; at the same time care must be taken that several representatives of the same subjects are not assigned to the same seminar.

Candidates whose moral integrity is seriously doubted are to be excluded from the assignment; this step, however, needs the approval of the minister.

A candidate is not permitted to change from one institution to another within the *Seminarjahr*. The employment of candidates outside the place in which the seminar is located needs the approval of the minister.

§ 5

The director and the teachers named by the provincial school board are responsible for the systematic training and practice of the candidates (§ 2, A) according to the following regulations:—

a. For the instruction of the candidates weekly sessions of at least two hours each are to be held during the whole year (vacation time excepted) under leadership of the director or one of the teachers named; to these sessions the other teachers are to be admitted also. In these meetings the academic form of lectures is to be omitted as far as possible; on the contrary, emphasis should be laid on discussions and instruction concerning the requirements of practical school life. The following subjects in particular must be treated:—

The theory of education and teaching in higher schools, especially methods of teaching the particular subjects for which the candidates have been certificated. A historical survey of the development of the higher school systems and of important representatives of pedagogy, as well as discussion of important publications in the field of education and instruction at the present time.

Administration and organization of higher schools, official courses of study, examination regulations, and rules concerning certificates and promotions.

The principles of school discipline as far as possible in connec-

tion with definite events, and also in connection with conference records concerning these events; school regulations; relations between school and home; the principles of school hygiene with special reference to the interior equipment of schoolrooms and to school administration.

Supervisory authorities, the assignment of duties to teachers and class masters, the form of official reports and petitions.

Assignments for observation of lessons as well as preparation for practice teaching (see *b*) and for the correction of home work; discussions of teaching problems in their personal relations.

According to the requirements of the chairman, the candidates must deliver short reports, as previously mentioned, on those subjects lying within their sphere; they must also give lectures; special emphasis should be laid on the training of the candidate in fluent speaking.

Minutes of these seminar meetings must be kept by the candidates, which, after verification by the chairman, must be signed at the next meeting. The provincial school boards should take care that from time to time a part of these minutes, as well as of the topics given to the candidates for their reports and their work (§ 5, *d*), are exchanged between the seminars for the mutual stimulation of teachers and directors.

b. In close connection with this instruction the candidates are systematically occupied with practical exercises in teaching. These consist in observation lessons and in their own practice teaching. The instructions of the director are authoritative for these observation lessons, which must be arranged according to certain points of view.

In these observations the candidates should gain a general view of the problems of the school; they should also become acquainted with the technique of teaching special subjects in the different classes, and they should get through observation an idea of the viewpoints and peculiarities of the classes in which they themselves

are to teach later. With all candidates importance should be attached to the observation of German lessons.

The teachers whose classes are to be observed by the candidates must be informed in advance ; they are obliged to explain to the candidates the standing of the class, the general aim of instruction, and the special teaching problems as well as the best way to solve them, and thus contribute their share to the practical training of the candidates.

Practice teaching begins as soon as the candidate feels somewhat at home in the institution, and it takes place under the leadership of the director with the coöperation of the regular teachers of the subjects concerned. In these lessons, however, the teaching topics which at first are limited in time and importance, have to be gradually extended according to the ability of the candidates, so that they may have the opportunity to test their own power and to be trained in independent instruction. For these lessons the candidates must outline the subject matter, and, as long as the supervising teacher thinks it necessary, they must prepare a lesson plan. It is recommended that even those candidates who did not qualify for instruction in German should have some practice in German instruction.

About once a month the candidates must teach lessons at which, as a rule, in addition to the director, the regular teacher of that subject and the other candidates must be present. These lessons are to be discussed in the general meetings with reference to their plan and development (see under *a*) ; in this discussion attention must be drawn to mistakes which the candidates have made in their preparation, in the pedagogical treatment of the pupils, and in their own attitude before the class. Care should be taken that the candidates get acquainted with the means of instruction and their use ; for this purpose they should be assigned particular duties in the organization and utilization of collections, especially those which are used in the teaching of natural history and geography.

The candidates must also take part in the direction of play hours and, when necessary, also of work hours, as well as in the physical exercises of the pupils and in school excursions.

As far as the local school conditions permit, candidates sometimes should be given opportunity to attend lessons in the seminars of elementary teachers and in different kinds of elementary schools.

The teachers in charge of the candidates are obliged to report their special observations from time to time to the director and to seek his advice.

c. All candidates must, as a rule, be invited to examinations and teachers' conferences. Upon request they must answer inquiries about pupils as far as those taught by them personally are concerned. At these conferences the candidates should also be given practice in writing minutes.

d. The candidates are recommended to keep a short diary concerning their occupation during the *Seminarjahr*, especially concerning the lessons which they themselves have given and have observed. About two months before the end of the *Seminarjahr* every candidate must hand in a thesis assigned to him by the director. These theses, in the choice of which the reasonable wishes of the candidates should be considered, are as a rule so constructed that they include theoretical considerations and practical applications. They should not involve the treatment of an elaborate literary subject, but they should give the candidate the opportunity to work out a literary subject within his sphere and to connect it with his own observations and experiences. Even if the candidate has had a very extensive teaching experience, exemption from this final thesis is not granted.

§ 6

The director and the teachers assigned to the training of the candidates must, if necessary, be partly relieved from their own teaching.

§ 7

At least three weeks before the end of the *Seminarjahr* the director must present to the provincial school board a detailed characterization of every individual on the basis of personal observations made during their training (for every candidate on a special blank). In this characterization are to be treated: the conduct and activity of the candidate during the *Seminarjahr*, the ambition shown by him, his capacity for scientific work, his ability to teach and the stage reached by him in his practical training, as well as his state of health, his financial position, his social attitude, and his behavior towards his colleagues, so that the supervising authorities may be acquainted with special capacities as well as with striking shortcomings in the candidate's conduct, ambitions, and attainments. The theses (§ 5, d), with the criticism of the director or the teacher in charge and the application for admission to the *Probejahr*, must accompany the characterization. In the application for admission the candidates may express desires in regard to the place of the *Probejahr*, which is generally spent in the same province as the *Seminarjahr*; the provincial school board will consider these desires if they facilitate the support or the further education of the candidate. If, however, the provincial school board thinks it advisable to order a provisional employment of the candidate, such desires must be disregarded.

Four weeks after the end of the *Seminarjahr* the director must report to the provincial school board concerning the work of the year. In the first year of the existence of a seminar the report must contain a very exact description of the arrangements made; but later it is to be limited to shorter statements of any alterations in methods and to extraordinary events. A copy of the characterizations of the candidates, which have been mentioned above, is to be added also.

In the case of candidates whose admission to the *Probejahr* is questionable on account of defects in or outside the school, the

provincial school board must require a prolongation of their seminar time for a year or half a year at another seminar.

Candidates who, according to the unanimous judgment of the provincial school board, appear unfit for the teaching profession must be told that they cannot be admitted to the *Probejahr*.

B. The Probejahr

§ 8

On the basis of the applications for admission which are acceptable according to the regulations under § 7, the provincial school board assigns the candidates at the beginning of a summer semester or a winter semester for a continuation of training to one of the institutions named in § 2, *B*; it is to be noted that not more than three candidates may at the same time be employed at a school with a nine years' course, and not more than two candidates at a school with a shorter time for instruction. When this assignment is made, the result of the *Seminaryahr* has to be reported to the directors (see § 7).

Permission to change the institution during the *Probejahr* can be given only under exceptional conditions.

In the case of candidates who, after the beginning of the *Probejahr*, go to foreign countries, either to continue their own education for the school service (for instance, as exchange teacher or with a traveling scholarship) or to teach in German schools, the provincial school board to whose districts the candidates belonged up to that time may count the time spent there as part of the *Probejahr* if the candidates can present sufficient proof that they have in all respects merited such a privilege.

§ 9

According to their teaching qualification the candidates are at once to be intrusted with larger connected teaching problems, and to be given from eight to ten hours per week of actual teach-

ing. In the case of a candidate who is employed a greater number of hours, compensation must be given to him according to § 12.

This work is done under the leadership of the director of the institution and of those teachers in whose classes the candidates teach or whose lessons they have taken over.

The entire employment of the candidates is determined by the director, who must see to it that opportunity is given them to instruct in several subjects and in more than one grade. Candidates, whose certificate includes the natural sciences and geography, are for some time to be assigned to a qualified teacher in order to get practice in the use of means of instruction and the ordinary apparatus, as well as in the management and maintenance of collections. For the candidate's own benefit it is permitted and even advisable to intrust the teaching of German for a short time to those candidates who did not qualify for German.

§ 10

The director and the teachers of the institution whose lessons the candidate occasionally takes over should always keep in mind that the object of the assignment is exclusively the promotion of the candidate's practical education.

Immediately after the candidate's entrance, the directors should accurately point out to him his duties, acquaint him with the regulations of the school, and in the light of the communications of the provincial school board concerning the result of the *Seminarjahr*, help and advise him (§ 7). The directors must watch the conduct and the activity of the candidate, visit him from time to time in his lessons and draw his attention to accidental mistakes, and, if necessary, warn him seriously by indicating the consequences of disregarding this advice (§§ 15, 16).

The teachers in charge of the training of the candidates are obliged to attend the candidates' lessons very often in the beginning, later, at least twice a month; to examine the papers which

they have corrected; and to advise them concerning matters outside of instruction.

The respective teachers must report to the director their observations concerning the work and the ambition of the candidates assigned to them, and must consult him concerning further requirements.

§ 11

The candidates must be present at class exercises especially designated by the director; they are also obliged to be present at examinations and teachers' conferences, according to the arrangement of the director, and to help in making out certificates for the pupils instructed by them.

§ 12

A candidate who has not yet finished his *Probefahr* may, in exceptional cases, be employed by the provincial school board as a scientific assistant, either as a substitute for a regular teacher or for an officially appointed teacher; in case of an increased need of instruction, the additional work may be assigned to him rather than to a new teacher.

In this case the candidate receives remuneration; he also receives the right to vote in teachers' conferences on all questions which concern the class conducted by him or the pupils instructed by him.

§ 13

As evidence of the degree of pedagogical insight reached the candidates must, towards the end of the *Probefahr*, present to the director a report concerning their work. (Compare the remark about the keeping of a diary, § 5, d.)

§ 14

At least three weeks before the close of the *Probefahr* the director reports on its result to the provincial school board in a way similar to that provided in § 7, 1. The work mentioned in § 13 and a short criticism of it must be presented with this report.

§ 15

The provincial school board soon states, on the basis of the reports of the directors concerning the *Seminarjahr* and the *Probejahr* and on the basis of the observations of the district advisers, its opinion of the candidate's work and the result of the entire two years' practical training, and decides whether the candidate can fill an appointment or not.

If it is doubtful whether a candidate is worthy of appointment, the provincial school board must order a prolongation of the *Probejahr* at first for half a year and must defer recognition of his teaching ability. A certificate concerning the teaching ability of a candidate can by no means be given if in the meantime it has been proved that the candidate, either through physical defects or through unavoidable pedagogical defects, is unable to fulfill his duties as a teacher or educator of youth, or if the candidate on account of his conduct within or without the school appears unfit for the teaching profession. This decision must be communicated in writing to the candidate with the reasons for it.

§ 16

The certification must take place so early that the oath of the candidates, as far as they desire to enter the higher public school service, can be taken before the first of April or the first of October. A certificate concerning his practical training must be delivered to the candidate who has been considered capable of teaching.

§ 17

Special regulations apply to the reports concerning the completed practical education of the candidates, which are to be made at Easter or in the autumn by the provincial school board.

§ 18

The minister reserves to himself the right of exemption from the two years' practical education in individual cases; for instance, in the appointment of clergymen to the higher school service.

Lines of Development. — An examination of the conditions for the certification of teachers in the higher schools from 1810 to the present time shows certain changes which may be summarized as follows:—

1. Additional subjects have been introduced from time to time, — philosophy, history, theology, pedagogy, geography, physics, botany, zoölogy, English, chemistry, mineralogy, and applied mathematics.
2. Increase in the number of subjects upon which the candidate *may* pass examination is accompanied by a decrease in the number upon which he *must* be examined. At first all the subjects were included in the examination; after 1866 oral examination was required in part of the subjects, and both oral and written examinations were required in all the subjects which the candidate desired to teach; since 1887 an oral examination has been required in philosophy, pedagogy, the German language and literature, and religion, and both oral and written examination in the subjects which the candidate desires to teach.
3. There has been a change in the grouping of the subjects in which the candidate may secure the teaching certificate. In 1831 there were three groups; in 1866 four groups were established; and since 1898 there have been six required combinations of subjects.
4. The written work has increased in severity and definiteness. Instead of covering all subjects, as at first, it is

now limited to two theses to be prepared within a period of sixteen weeks, and a three-hour examination in one of the principal subjects. One of the theses is in the sphere of the four subjects included in the general examination, the other in one of the principal subjects.

5. The special examination for a particular position has disappeared.

6. The division into lower, middle, and upper classes as a basis for grading certificates has been displaced by the division into the six lower and the three upper classes.

7. At first two grades of certificates were issued, then three, then two, and now but one. Within this one grade, however, certain qualitative differences are recognized.

8. The number of times that an examination may be attempted has become more and more limited, and now only a second trial is permitted.

9. For many years no written examination was required of men who had taken a university degree. At present the only special favor granted them is that they may submit the doctor's dissertation in place of one of the theses, provided it covers the proper field.

10. Before 1898 an applicant who showed evidence of incompetence might be advised by the commission not to attempt the examination, but the privilege could not be denied him; since that date the president of the examining commission is required to deny him admittance.

11. The test lesson, required at first, fell into disuse,

but the need of practical training was greatly emphasized by the introduction of the *Seminarjahr* in 1890.

12. The influence of the schoolmen both in the training of candidates and in their examination has increased, as is indicated by their prominent position on the examining commission, and by the provisions for the management of the gymnasial seminars.

13. All the changes show a tendency to make the conditions for certification more severe, more explicit, more pedagogical in their nature, and, on the whole, more conducive to the thorough professional training of candidates. To an ever increasing degree, they emphasize the professional nature of the calling.

CHAPTER III

INSTITUTIONS FOR THE TRAINING OF TEACHERS

IN the previous chapter the development of the legal qualifications for the teacher's office during the last century has been briefly traced, and the present requirements have been given in detail. The next step is naturally a consideration of the institutions in which teachers receive their training. These, too, have a history, and it is worth while to see how they came to be what they now are. Besides the university as a whole, there are two kinds of special institutions, the university seminar and the gymnasial seminar. No attempt will be made to give a complete history of these seminars, but only to present that which is typical in the development of each, together with a concrete and somewhat detailed account of what is now done in them.

THE UNIVERSITY

A. **The University as a Whole** has always played the most important part in the training of teachers for German higher schools. Before the state assumed responsibility for the training of its citizens, education was in the hands of the church and private individuals. The

priesthood and the ministry were always trained at the universities, and the priests and ministers controlled education either through the church or through private efforts. Churchmen were teachers before they became churchmen, and often afterwards also. A degree from a university was, throughout the eighteenth century, an easy passport to the teacher's position. For some years after the state began to exercise control over the schools, a university degree was so highly esteemed that its possessor was excused from a written examination. During most of the nineteenth century three years' attendance upon a university was an absolute necessity for all who would become teachers in the higher schools. It is a significant fact that the university as a whole has exercised more influence upon the training of teachers for these schools than have all other institutions organized for special pedagogical purposes, either within it or outside of it.

B. The Theological-philological-pedagogical Seminar. — Within the university the first institution organized for the particular purpose of training teachers for the higher schools was what may be called the theological-philological-pedagogical seminar. As the name implies, it was inspired by two or three interests which usually worked in harmony, although sometimes one interest and sometimes another dominated. In a few cases, notably that of the seminar connected with the university at

Halle under the leadership of Wolf, one interest was not only dominant, but it was actually antagonistic to the others.

From a retrospective point of view it seems wholly natural that the first interest in the special training of teachers should appear among theologians and philologists. In the sixteenth and seventeenth centuries the former were leaders of the people intellectually as well as spiritually, and doubtless they realized much more clearly than any one else the problems of instruction and training and the importance of preparation for the work of teaching, whether in the church or in the school. Their task was the development of character through an appeal to feeling and impulse as well as to intellect. The philologists, on the other hand, were the most scholarly people of the time and had the clearest appreciation of the problems of scholarship. Their interests were mainly intellectual, and they stood for the best in intellectual effort and attainment in the schools. Not infrequently the interests of both theologian and philologist were combined in one person. The churchman had to be a student of the languages, and, in most cases, the linguist had official connection with the church. At all events philology and theology combined to form the first institution within the university in which the training of teachers for their work was recognized as an important object.

Göttingen. — The first seminar of this kind was founded at Göttingen in 1737. Concerning it, Fries writes as follows: —

"The oldest example of a university seminar is the institution founded by J. M. Gesner. As a student at Jena he had received the first suggestion of it from his teacher, Buddeus, who desired to equip the students of theology with pedagogical knowledge for their future calling as teachers and wished to found a pedagogical seminar for this purpose. As a guide for it, Gesner wrote, in 1715, his 'Institutiones rei Scholasticæ,' a kind of compendium which was based, not upon his own experience, but upon a study of Ratke, Comenius, and Locke. The work showed his own good judgment, however, and served as an outline of his intended lectures. In it he treated didactics especially, but he also gave rules for education. His later views, ripened through long experience, can be found in the prefaces of different books, especially in the 'Primæ lineæ isagoges in eruditionem universalem.'

"The plan was not carried out at Jena, but after Gesner had gathered rich experience in Weimar, Ansbach, and Leipsic, the opportunity was finally given in Göttingen for the realization of his ideas. As inspector of the *Gymnasien* in the Braunschweig-Lüneburg districts, he remained in particularly close touch with the practice of the schools. Opportunity was also given in the philological seminar in Göttingen to train theologians for the work of teaching. Three kinds of instruction were undertaken: first, scientific, in philology, mathematics, natural science, history, and geography; second, pedagogical, in which the *institutiones* previously mentioned was used as a foundation; third, practical, by means of practice teaching in the city school. Under Gesner and also under his successor, Heyne, this seminar trained a great number of capable schoolmen for the country. Fr. A. Wolf visited it several times, but had no official connection with it. Characteristic of the institution was the union of instruction in subject

matter with pedagogical instruction. This union was certainly influenced by the university customs of the time, since the subjects which belonged properly to the schools received insufficient consideration in the lectures. It was typical, however, of this whole class of seminars."¹

Halle. — The seminar at Halle had a checkered history and presents several interesting phases of development. In 1765 J. S. Semler, one of the Halle rationalists, sought to give the members of his theological seminar some preparation for the work of teaching. The instruction consisted mainly in philological lectures and exercises in the classics. The Minister of State, von Zedlitz, became interested in the idea and in 1777 provided for the establishment of a special pedagogical division of the theological seminar, in which teachers for the *Volksschule* might be trained and to which a practice school should be attached. The whole institution was under Semler's supervision, but the work was done by Schutz who gave pedagogical lectures besides managing the institution directly. When the latter was called to Jena two years later, the Minister sought a successor who was in sympathy with the Philanthropinistic movement; but Trapp, the man chosen, was not successful either in his lectures or in the management of the practice school, and soon left the position. Fortunately, the interest of Minister von Zedlitz continued, and Fr. A. Wolf was placed at the head of the work with the title of professor of philology and pedagogy. As

¹ Fries, W., *Die Vorbildung der Lehrer für das Lehramt*, 22.

professor of pedagogy he was placed under obligations to act as leader of the practice school, to give instruction in it, and to give pedagogical lectures. He had little faith, however, in the distinctly pedagogical side of the work, and he not only permitted the practice school to die, but caused a professorship in oratory to be substituted for the one in pedagogy. In 1787 he established a philological seminar in place of the pedagogical seminar, and then, with rare zeal and ability, he devoted himself to the training of philologists, many of whom caught his spirit and later became excellent teachers. Wolf's contention was that the work of the schools could never be highly successful so long as it was conducted by men whose main interest lay in theology and the church. In the new emphasis which he placed upon thorough knowledge of subject matter and the choice of teaching as a life work, he performed a great service. It is interesting to note that in later years he had a higher appreciation of both the need and the value of pedagogical training.

In 1804 the theological seminar was again divided into a theological and a pedagogical section. The latter was to prepare teachers for the *Gymnasium* and for the middle and lower *Bürgerschulen*. In 1829 this was, by ministerial order, made into an independent institution; but it was provided that the director must be both a professor in the university theological or philosophical faculty and also a practical schoolman. The director, Niemeyer,

wished to join it with the *Franckesche Stiftungen* whose schools afforded abundant opportunity for observation and practice, but the university authorities did not approve the plan. The institution soon lost its independence, and in 1835 it was made permanently a part of the theological seminar. In 1853 it came under the management of the professor of theology, Kramer, who was also Director of the *Franckesche Stiftungen*. Lectures were now given on pedagogy, didactics, and the history of education and of systems of instruction. To this theoretical instruction were added practical exercises of three kinds: first, members of the seminar were required to instruct pupils called from the schools for the purpose, the teaching being observed and afterwards criticized by their colleagues and the director; second, they were required to visit the classes of superior teachers in the schools; third, they were sometimes required to give independent instruction in the schools. This management continued successfully until 1881, when the directorship was placed in the hands of a new professor of theology, Dr. Herbst. In 1882 the ministerial order that candidates must have passed their state examination before entering upon their practice year, antagonized the prosperity of the seminar; and, upon the death of Herbst, in 1884, it was removed from the university to Magdeburg and placed under the control of the provincial school board.

The seminars just described may be taken as typical of the spirit and attainments of all the institutions of this class. Other seminars — linguistic, historical, mathematical, and scientific — were organized in connection with the universities, the main purpose of which was the development of academic scholarship without particular reference to pedagogical questions, and these seminars have become a well-established feature of university life everywhere.

C. The Pedagogical Seminar. — In the theological-philological-pedagogical seminar the main interest lay in the mastery of subject matter, and more emphasis was placed upon this than upon distinctively pedagogical questions. A little later the interest in purely pedagogical questions became greater, and seminars were established in which pedagogical problems occupied the attention of those concerned, a satisfactory knowledge of subject matter being regarded as a necessary presupposition.

Königsberg. — The efforts of Herbart at Königsberg are of special interest because of the Herbartian influence upon later generations. Herbart's personality was of that winning type which enabled him to secure what he wanted for carrying out his project. In 1810 the Prussian authorities gave him money and authority for the establishment of his pedagogical seminar. In the sketch of his plans which he presented to William von Humboldt, Herbart proposed to center the interest of many teachers

and students upon a small number of pupils cared for in a home over which he should have entire control. The number of pupils was limited to twenty, and it never actually exceeded fifteen. They ranged in age from nine to sixteen. There were to be four classes, the highest preparing for *Secunda* or *Prima* in the *Gymnasium*. Herbart himself, as director, was to be assisted by one supervisor, who had taken his doctor's degree, and by one teacher, who might be a university student. The supervisor should live with the boys in the home and be at all times responsible for them. The teacher should care for them especially during holiday periods and at other times in the absence of the supervisor. The supervisor should make a yearly report upon his observations and experiments. In the management of the school there should be no attempt to follow the lines laid down for other schools, as one main purpose was the development of pedagogical science through experiment. The philosophical and pedagogical lectures and the practical work were to stand in the closest possible relation. Members of the seminar should hear the lectures, be responsible for the pupils at specified times, teach classes under direction and criticism, visit one another's classes, and make reports upon observations or assigned topics. A meeting of the seminar should be held once a week for the reading and discussion of reports. As actually carried out, the organization was somewhat different. At first, students served

under Herbart's direction in place of the supervisor. The home for the boys was provided only when he took them into his own house. Two regular teachers were at length secured who worked under his supervision. The school stood entirely apart from other schools, and the arrangement of the work was different. Notwithstanding the rather unfavorable conditions under which the work was carried on, the results both in the practice school and in the seminar were unusually satisfactory. The success of the institution seems to have been largely dependent upon Herbart's personality, however, for, at his departure from Königsberg in 1833, it entirely collapsed. Relatively few of the students trained here under Herbart became teachers in the higher schools, but he had been an inspiration to some who carried on the work elsewhere in the universities.

Jena. — The university pedagogical seminar idea has been most consistently worked out at Jena. Brzoska, who had been an enthusiastic student and assistant of Herbart at Königsberg, gave psychological and pedagogical lectures here from 1832 to 1839, and he also announced practical pedagogical exercises. The latter, however, seem to have found no considerable place. His successor Graefe, director of the *Bürgerschule*, tried the same, but with no great success. In 1843 Professor Stoy founded a pedagogical society and laid a firm foundation for the later substantial development of pedagogical work in the

university. His own lectures on general and special pedagogy constituted the basis of all his work. From the beginning Stoy emphasized the necessity of practical as well as theoretical pedagogical training for theologians, and his efforts were directed towards providing for their needs. In the later years of his life, he estimated that about one third of the members of his seminar were theologians. He wished to provide a stipendium for them, so that they could study with him a half year after they had passed their examination, but the plan failed. Towards the close of his career fewer theologians attended his seminar, but, to his great satisfaction, their places were taken by candidates for the position of teacher in the higher schools who had passed the state examination (*Staatsexamen*) or taken the Doctor's degree. Many elementary school teachers also attended his seminar.

In 1857 Stoy established a regular order of procedure with reference to the meetings of his seminar. These meetings consisted of the *practicum*, a trial lesson given by a candidate before all the members of the seminar; the *criticum*, in which the work of the practicum was discussed and criticized by the candidate himself, by a special critic appointed for the purpose, and by the members generally; the *scholasticum*, in which the general opportunities and needs of the practice school were discussed; and the *pedagogicum*, in which pedagogical questions of all kinds were considered. One meeting of each was held every week.

Stoy early established a school for observation and practice, and this was always the most characteristic and interesting feature of his work. At first it consisted of a few boys from the *Bürgerschule* who came voluntarily, but the second year he took over the management of a boys' home, and this gave him a number of classes for the use of his seminar. Three *Volksschule* classes, each containing about ten boys, were assigned to the use of the school; then the city school authorities placed two classes of girls at his disposal, and, finally, a city boys' school was placed under his control. The candidates entered heartily into the work of practice teaching, and the seminar prospered. Stoy himself taught in the school under the observation of his candidates; he superintended practice teaching, and he gave lectures on psychology and pedagogy, which applied directly to the work in hand. He was untiring in his efforts and was himself the life of the seminar. Organized efforts were made to promote school celebrations, gymnastics, church attendance, Christmas enjoyment, school journeys, and field work with a harvest celebration; and contributions were secured for these purposes.

The very prosperity of the undertaking proved its undoing. On the ground of its previous success, Stoy, in 1863, asked for a larger and surer financial equipment and for students' time to the amount of twelve weekly hours of instruction. He proposed to admit to the semi-

nar, first, those who were candidates in theology or for the position of teacher in the higher schools; and, second, students of theology or philosophy who had spent three semesters in study. Members of the first class were to take part faithfully in all assigned tasks, to observe the rules of the school to the best of their ability, and to prepare and present each semester a report or discussion upon some topic in philosophical or historical pedagogy. Members of the second class were regarded as associates and, at their option, were freed from part or all of the practical exercises. These propositions, especially that concerning the time to be required of the students, met with opposition on the part of the theological faculty. The decision made by the authorities in 1865 provided that students should not be obliged to spend more than four hours per week in the seminar and should not be permitted to enter it until the fifth semester. As Stoy could not endure this limitation, he resigned his position and moved to Heidelberg, where he remained until his recall to Jena in 1874. It is of interest to note in passing that his efforts to organize a seminar in Heidelberg were unsuccessful. During his absence from Jena the practice school was returned to the management of the city authorities. In 1876 it was again turned over to him, and the work in it continued, until his death in 1885, in much the same manner as in the earlier years. In the school there were a principal teacher and three class

teachers who were assisted by the candidates. The number of seminar members reached forty. Stoy lectured on psychology, philosophical pedagogy, gymnasial pedagogy, encyclopedia, methodology and literature of pedagogy, Herbart's life and system, logic, and introduction to philosophy. Notwithstanding his great age, he worked indefatigably for the success of the enterprise, and it prospered.

Stoy's able successor, Professor William Rein, has continued, with only slight changes, the work begun by the former. Instead of a training school in which all classes are represented, there are now but three classes from the *Volksschule*, some seventy-five pupils in all. For this school, which is housed in a plain but good building, there are a principal and three class teachers. They are assisted by candidates. Stoy's four weekly meetings of the seminar have been reduced to three, and the changes made have had the general effect of lightening the work required of students.

The meetings of the seminar for one week, as observed by the writer, were as follows: The *practicum* was held at seven o'clock on Tuesday morning in the large room of the school building. Those present consisted of the director, the principal of the school, the candidate in charge of the class, a class of seventeen boys about eleven years old, and fifty observers, a few of whom were visitors. The candidate, a young man who was studying for the

degree of doctor of philosophy, had entire charge of the class and did good work. The subject was geography, and the particular topic, the Netherlands. By means of a series of statements and questions, the teacher developed a number of facts concerning these countries, constant reference being made to the wall map and to the pupils' atlases. Before the close of the hour the pupils were required to restate these facts systematically. The plan of the lesson showed intelligent regard for pedagogical principles, even though there may have been wanting the skill in applying them that comes with experience. The written outline of the plan prepared by the teacher was passed around to the members of the seminar.

The second meeting of the week, the *theoreticum*, was held on Wednesday from eleven to one in the university auditorium. The topic discussed was the observations made by the members of the seminar during a recent visit to schools situated some miles from Jena. The director suggested that the discussion should be directed to three points: adverse criticism, statement of what pleased, and suggestion of what could be used advantageously in the seminar practice school. Only the first two points were considered, the topic being continued for further discussion at the next meeting. In the discussion, which was general, there was appreciation of good points in the teaching observed, as well as unsparing, penetrating, adverse criticism. A member of the seminar was

appointed to send to the directors of the schools visited a statement of the points mentioned in adverse and favorable criticism.

The third meeting, the *conference*, was held on Thursday evening from half-past eight to half-past ten, in a room of the historic *Burgkeller*. It was semi-social in character, at least an opportunity was offered for social intercourse before and after the session, as those present sat around tables and partook of refreshments. This was the largest meeting of the week. Eighty names were called, and some seventy-five persons were present. The membership includes men and women, part of whom are young, others somewhat mature. Among the latter was a considerable number of school officials who were seeking better training for their work. At the opening of the session two former members of the seminar, who now hold important positions, were introduced. After the reading of exhaustive minutes of the preceding meeting and the announcement of the program for the next meeting, the seminar proceeded to the criticism of two practice lessons, one of which has been described. The order of procedure was self-criticism by the candidate, criticism (read) by the referent appointed for the purpose, reply by the candidate, general criticism by the members of the seminar (which on this particular occasion was not spirited), pertinent remarks by the principal of the practice school, and closing discussion by the director. To

an American observer it was a noticeable and not altogether agreeable fact that, of the twenty or more women present, none contributed anything to the discussion.

In addition to his duties as director of the seminar, Professor Rein gives lectures on general and special pedagogy, psychology, foreign school systems, and ethics. Jena offers excellent opportunities for the study of general pedagogy and the general principles underlying practical teaching. The work is not highly specialized, indeed the director believes that as much attention should be given to the training of lower school teachers and school officials as to the training of teachers for the higher schools. Under a law peculiar to Saxe-Weimar, the state to which the University of Jena belongs, candidates for the higher school office who have passed their state examination, are required to attend the university lectures on pedagogy and to teach at least two hours per week in the university practice school at the same time that they do the work of the *Seminarjahr* and *Probejahr* in the city *Gymnasium* under the direction of the man who is at once rector of the *Gymnasium* and director of the gymnasial seminar. The higher-school practice teaching is done in the *Gymnasium*, and it is here that they receive the most direct practical training for their work.

The following rules formulated for the government of the university seminar are of interest as indicating in detail the spirit and method of its work.

REGULATIONS FOR THE PEDAGOGICAL SEMINAR OF
THE UNIVERSITY AND ITS PRACTICE SCHOOL AT
JENA

I. GENERAL REGULATIONS FOR THE SEMINAR AT LARGE

I. MEMBERS AND THEIR DUTIES

(a) *Membership*

§ 1. Any student or auditor at the University may become a member of the seminar by applying personally to the director. Admission may be had at any time. Regular members are to register their names and an autobiographical sketch in the seminar book.

(b) *Classes of Members*

§ 2. Besides the teachers of the practice school, there are regular members and associate members. Regular members are those who give instruction in the practice school. All members are obliged to attend the weekly conferences of the seminar.

(c) *Teachers*

§ 3. The principal and the two class teachers direct the school work under supervision of the director. The practice school has three classes and three teachers.

§ 4. The teachers instruct the candidates in preparing their lessons, receive the lesson plans, and present the latter from time to time to the director. They watch over the lessons of the candidates and are allowed to interfere in these lessons. Conversation with the candidates during the lesson is not permitted; only short directions and hints are allowed. Teachers should arrange critical discussions with the candidates, if possible, immediately after the lessons. Under certain circumstances the lessons may be entirely left to the candidates. From time to time every teacher should have conferences with his candidates, especially concerning the making out of concentration diagrams for the coming week and concerning uniform measures of government and discipline.

(d) Candidates

§ 5. Before taking a class the candidate must first have an understanding with the regular teacher and the class teacher concerned. The new candidates may begin to instruct only after having observed many lessons, especially those of the subject which they have chosen.

§ 6. A class is taken for a whole semester. Every lesson must be based on a lesson plan which must have the form of methodical unity as far as the subject matter permits it. The subject matter must be accurately and distinctly organized, and the single parts must be emphasized by marking them on the margin. Questions concerning concentration and the results to be aimed at should be stated accurately. In details the instruction may be conducted freely. As the instruction in the practice school is based on concentration, every candidate must try to make himself familiar with the lines of concentration of other subjects. For some time he should also attend lessons which are closely related to those subjects which he teaches. Moreover, he should acquaint himself with the illustrative means of instruction which the school museum possesses, particularly with photographs.

§ 7. The lesson plans must always be delivered to the class teachers in whose class the lesson is to take place. The criticisms of the class teacher and of the director must receive due consideration. The candidate must also adjust himself to those means of discipline which are used in the practice school.

(e) Members in General

§ 9. The professional spirit should be such as to lead members of the seminar to attend the school celebrations, May festivals, and excursions of the practice school.

§ 10. A special book has been provided for reports of the celebrations of the seminar (birthdays of the Emperor and the Grand

Duke, celebration of Christmas, etc.). A member is responsible for these reports.

§ 11. The observation of lessons and the exchange of opinion concerning them and concerning reports in the observation book are opportunities for cultivating and maintaining a competitive professional spirit. Mutual general observations are especially recommended. The associate members should also often take the opportunity to observe and to use the observation book. The person criticized in the observation book may write a reply, to which may be added the remarks of the class teacher concerned. No controversy may be continued after the following meeting.

§ 12. In connection with the celebration of Christmas for the pupils of the practice school there exists also a celebration of Christmas for the members of the seminar in remembrance of the day of the founding of the seminar (December 9, 1843). This celebration should give former members of the seminar opportunity to show their attachment to the institution.

§ 13. From time to time the seminar publishes books. Communications, especially concerning the literary activity of former members of the seminar, are very much wanted for publication in these books. Up to the present time thirteen books have come out; they can be purchased in the seminar, from the regularly appointed teacher, for one mark, a mark and a half, two marks, and three marks.

(f) Withdrawal from the Seminar

§ 14. Withdrawal from the seminar as well as admission to it is permitted only on personal application to the director. Members who leave Jena are expected to keep up their connection with the seminar, especially to furnish communications for the seminar book.

2. WEEKLY CONFERENCES OF THE SEMINAR

(a) *Theoreticum*

§ 15. In the theoreticum, which is held in one of the lecture-rooms of the university, ethical and psychological problems, special scientific educational problems, and questions of method are discussed. The discussion is led by the director. Any member of the seminar may take part in the discussion.

(b) *Practicum*

§ 16. The practicum consists of a trial lesson, in the presence of the director and all members of the seminar, which is assigned to candidates and sometimes also to class teachers. There is at least one practicum weekly.

§ 17. The practicum is not to be confounded with an examination; on the contrary, it should give an illustration of the teaching of the candidate and must therefore be fitted into the entire course of instruction. The lesson plan which forms the basis for the lesson should be open to inspection by all members of the seminar during the practicum. In this lesson plan the place where the lesson begins is to be marked accurately.

§ 18. The regular teacher assigns every practicum to a chief critic who has to prepare a written criticism to be delivered to the class teacher a day or two before the meeting, if possible, and afterwards to the director. This criticism will then be read and discussed in the meeting. A special form exists for this criticism.

§ 19. The criticism is preceded by a self-criticism in which the candidate must clearly explain his own opinion of the mistakes which he made in the trial lesson, without having consulted the critic or the class teacher concerned.

§ 20. The regular teacher assigns the writing of minutes to another candidate who must make a list of the questions asked during the practicum. This statement must cover the following topics:—

- (a) Were the questions formulated in the right way?
- (b) Were they distributed equally or were some pupils questioned too often, others overlooked?
- (c) Were the necessary summaries given according to the paragraphs of the lesson plan? Was there sufficient repetition? The notes of the candidate who takes the minutes must be used in the criticism. Criticism and self-criticism must be registered in special books.

(c) The Conference

§ 21. The conference takes place once a week under the leadership of the director or, in exceptional cases, of the regular teacher. The material for discussion is furnished by school affairs in general, and particularly by the weekly practicum.

The meeting is conducted according to the following program: —

1. Appointment of another candidate to take minutes.
2. Old minutes.
3. Attendance list.
4. Supervision of recess periods.
5. New practicum.
6. Observation book.
7. General affairs.
8. Discussion of the practicum.
 - (a) Reading of the criticisms.
 - (b) Discussion.

The regular teacher announces the order of the discussion. At the close of the meeting the usual contributions which cover the expenses of school journeys are collected and put into the treasury. The candidate appointed to take the minutes must do this and deliver the sum collected to the regular teacher for the traveling fund.

In addition to this main conference the principal teacher holds meetings in which disturbances in the school organization, absences, punishments, personal records, the aims of the week (concentra-

tion curricula) are discussed. The candidates must take part in these meetings.

§ 22. The minutes are taken by the members in alphabetical order. The particulars of the discussion should not be reproduced. The disputed points, reasons for and against, and the results should be summed up clearly.

§ 23. The chief part of the meeting is devoted to the discussion of the practicum. The latter begins with the reading of the criticism of the candidate upon his own work. This criticism should most emphatically lead the candidates to seek first in themselves for the mistakes which have been made and to avoid the use of unnecessary severity to excuse mistakes or to put the blame for them upon the pupils or some one else. The self-criticism is followed by that of the appointed critic. In connection with the different parts of the latter, the discussion occurs. The members of the seminar are required to prepare themselves thoroughly for this discussion.

Naturally a purely objective discussion of the points in question is required. Personal attacks and references should be avoided.

II. REGULATIONS OF THE PRACTICE SCHOOL

I. INSTRUCTION CONCERNING GOVERNMENT

Introduction

Government includes all arrangements which the school needs to create and maintain order as the first requirement for every kind of teaching or educating influence. Its purpose is to form the habits necessary to school life. It therefore demands particularly from the teachers a firm and punctual adherence to the rules, which naturally must be the same for all.

1. Before Schooltime

§ 1. Schooltime begins in the summer semester at 7 o'clock, in winter at 8 o'clock (for the lower classes at 8 or 9 o'clock).

Lessons begin fifteen minutes after the hour. The school clock gives the official time.

§ 2. It is the duty of pupils intrusted with offices to take care that the means of instruction which are to be used, such as textbooks, apparatus for nature study, maps and rulers, slates, pencils, and so on, are in the classroom in due time and in good condition. Whenever necessary, the teachers must give instruction to those pupils who have charge of these duties. During the lessons pupils should not be sent after apparatus or materials of instruction.

§ 3. As long as no standing rule has been laid down, the teacher must, at the beginning of every lesson, ask the pupils in charge to answer the question: Is everything in order? At this time also pupils should themselves announce absences. The children are to be trained so that after the command to sit down has been given, those who have absences to announce remain standing. These announcements are to be given quickly. If longer discussions or punishments are required, the announcements are to be repeated at the close of the lesson.

§ 4. As the instruction given can only be successful if the best order is maintained throughout the lesson, the teacher must, after the children have resumed their seats, pay attention to the following points: the children should sit quietly but naturally; their eyes should be fixed on the teacher; their hands should lie quietly on the benches; their legs should be kept quiet. Instruction may not begin until everything is in order.

2. *During and after Schooltime*

§ 5. As far as possible pupils are to be trained to make an independent statement concerning the home work and the aim of the lesson.

§ 6. During schooltime the same order with which the lesson was begun must always be maintained. Instruction may neither be

begun nor continued unless the pupils are orderly and keep their eyes fixed on the teacher; but the necessary order should always first be established through looks, hints, tapping on the table, or through such orders as "Eyes!" "Look here!" "Look at me!" Special attention must be given to this if the pupils, on account of the nature of the instruction given, need to look for some time at illustrative material or at written work.

§ 7. During instruction the teacher should so far as possible take a position on a step from which he can overlook all the children. He should not keep his eyes exclusively on the pupil who is questioned, or on the pupil who is talking. He may not without necessity turn his back on the class or individual pupils. He may not leave his place unless a pupil needs special aid. It is not allowed to touch pupils or to push them into their seats. Only in exceptional cases is the teacher allowed to sit; lounging is contrary to the good order which the teacher must preserve at all times.

§ 8. All questions and explanations of the teacher must be directed to the whole class. The children who wish to answer the questions indicate it by lifting the right hand. Only then must a single child be designated to answer the question. Every pupil who wishes instruction is required to lift his hand and wait patiently until the teacher asks what is wanted. Restlessness and answering without being asked are not permitted because they disturb instruction.

§ 9. If the teacher has called the name of a child, the latter rises quickly, stands straight without hanging his head or without leaning on the bench. When he answers, he speaks frankly and loudly. Low speaking, generally a consequence of slyness, must be overcome if possible through frequent speaking in concert. In the use of such an exercise the teacher should always observe whether the desired result is attained. To stoop to a low-speaking pupil means to encourage him in his bad habit.

§ 10. All orders of the teacher which concern the class at large, such as taking and putting away textbooks, copy books, and

writing utensils, the orderly distribution and collection of copy books, drawing books, textbooks, and other means of instruction, and the formation of lines when leaving the class, must be executed to firm, single commands, counting the moments of the action until the habit is firmly established. When such habits are formed, they must be continually controlled. Such brief commands are: "Books out," "Write," "Pens away," "Open your books," "Close books," "Distribute copy books and books," "Collect copy books," "Stand up," "Ready," "Form in line," "Go."

§ 11. Pupils should be taught the proper use of their books. The following rules should be especially observed:—

1. All textbooks and copy books must have covers and blotters.
2. When words and lines are to be shown in reading, or places on maps or globes, a pencil or small stick should be used; pupils should not be allowed to point with their fingers.
3. Blackboards and slates should not be wiped with the hands, and they should not be used as long as they are wet.
4. Pencils and pens are only to be handled in writing; they are to be put aside as soon as the work is done.

§ 12. When the director or visitors enter or leave the room, the children should rise and sit down again upon a signal from the teacher.

The candidates who observe should refrain from stating opinions during instruction. No one but the director or class teacher is allowed to interfere in the instruction or the government even if the teacher makes evident mistakes.

§ 13. The continual observance of all important hygienic factors, such as protection against glaring sunlight, temperature, and so on, is necessary. Only in exceptional cases are pupils permitted to leave the room.

§ 14. The signal at the close of the hour must be given by the teacher. It is not permitted to prolong the lesson after the striking of the clock or to assign home work, or to make up for time lost

at the beginning of the lesson. In exceptional cases, such matters may be settled by appointment with the children at the close of the forenoon or afternoon period. The children leave the room quietly in pairs.

§ 15. Especially at the close of the school day should attention be given to the order. Restlessness or premature packing of school materials should be punished instantly by sharply rebuking the children or by not allowing them to leave the school-room with the other children.

§ 16. 1. *End and purpose of personal help given.*—Personal help given to backward pupils should not have the character of a punishment. On the other hand, keeping pupils in after school is a punishment which may also be given to pupils in connection with their written and oral work if this work is continually neglected, especially if corrections, etc., are badly done and if the pupils are always lazy. Individual help given should, in the true sense of the word, help the pupil to reach the aims of the class and should try continually to raise him to the level of the class.

2. Participation in these lessons is determined by the marks on the written home work and by insufficient knowledge shown in oral work. In the first case, it is left to the teacher concerned to state what mark he considers the limit and, if there are several marks, whether they refer to form or content. The general impression may also suffice. The main requirement is thorough work, although the individual natures of the pupils should by no means be entirely neglected.

3. *Who gives this individual help?*—Individual help to backward pupils is given by a class teacher daily after the regular lessons. Those members, generally candidates, who are interested in these lessons, may give one or more lessons weekly after they have informed themselves concerning the special arrangements for the marking scale, the correction of mistakes, the treatment of the pupils, and so on.

4. *How is this carried on?*—During these lessons the greatest

quiet possible for the work of the pupils and strict obedience to the rules given should be exacted; if an explanation which concerns all pupils is to be given, the attention and coöperation of all pupils should be demanded. It is therefore recommended, in order that the teacher may thoroughly and lovingly devote himself to individual weak pupils, that not too many pupils should remain.

2. REGULATIONS CONCERNING DISCIPLINE

Introduction

Discipline has the same end as instruction, the formation of a moral and religious character in the pupil. Discipline, however, aims at influencing directly mind and will, whereas instruction tries to reach the same goal indirectly through enlarging the horizon of the pupil's ideas.

§ 17. The following arrangements are means of discipline.

1. *The morning devotion.*—Every school day begins with a general devotion for all classes. Prayer is said at the close of school.
2. The weekly devotion is conducted either by a regular teacher, a class teacher, or a candidate at the beginning or at the end of a school week.
3. The following occasions are celebrated by the school.
 - (a) Birthdays of the Emperor and Grand Duke.
 - (b) Christmas.
 - (c) May festival.
 - (d) Confirmation of pupils.
4. *School excursions.*
5. The school's saving fund is especially to be recommended to those pupils who take part in the school excursions, so that they may save the money necessary for these expenses.
6. The candidates should be heartily interested in the enrichment of the school library.

7. *Offices of pupils.* — Individual pupils are appointed to different duties in the school, garden, or workshop. Every office is a post of honor. Two pupils especially (*Klassenordner*), who are named alphabetically and who change weekly, have the following duties: —

- (a) To keep blackboard, sponge, and chalk in order.
- (b) To clean the teacher's desk and chair.
- (c) To open the windows during recess periods.
- (d) To write the date on a little slate in every classroom.
- (e) To procure clean water in jug and basin.
- (f) To fill the inkstands upon request.

One pupil should be permanently intrusted with the care of books, copy books, and other means of instruction in the classroom cupboard, as well as with bringing, distributing, and collecting them.

Individual pupils are also to be intrusted for a whole semester with the bringing and putting away of means of instruction for different subjects, such as maps, rulers, compasses. In all these cases the individual nature of the pupil should be taken into consideration as far as possible.

Every duty should aim at forming a fixed habit.

8. *The record book.* — Candidates as well as regular teachers should try through personal visits to get acquainted with the parents of the pupils and to influence them spiritually. They are recommended to watch every single pupil during the lesson, in the garden or workshop, or on the playground, to acquaint themselves more closely with them on excursions and journeys, and to enter into their thoughts and their conditions of life. If this is done in the right way, the idea of being questioned will not be wakened in the pupil. On the contrary, the teacher will win the heart, and the pupil will freely converse about everything on his mind, will gladly seek his teacher's advice, and so their mutual intercourse may indirectly serve character building. The observations made are collected, and written in a special book for each

class, and if enough material is collected, it is made into a personal record and written in a record book.

The following scheme should be observed:—

- (a) Home conditions.
- (b) Age, previous training.
- (c) External appearance, physical features, state of health, carriage and look, order in dress and in school equipment.
- (d) Development of the intellectual side (abilities, participation in the lessons, home work, favorite work, and tendencies).
- (e) Expression of emotions (intellectual, moral, æsthetic, religious emotions; intercourse with members of his home, and with teachers and comrades).
- (f) Proposals for the correction of defects in government, instruction, or discipline.

In making these records, special attention should be paid to the causal connection of observations and experiences.

3. PUNISHMENTS

All school punishments should be considered as corrective means which influence the pupil either directly (habituating him to order) or indirectly. They can be divided into two groups: punishments for government and punishments for discipline.

1. *Punishments for government.*—Punishments for government aim at reestablishing the disturbed order during instruction. The goal to be aimed at is therefore avoidance of punishments as far as possible through constant training.

§ 18. Special points to be attended to are: Children who enter after the teacher must remain at the door until the teacher tells them to sit down. The teacher must not wait too long before giving this command, but he should first ask an explanation of the late arrival. The punishment for this loss of time, if it is disadvantageous to the pupil in his lessons, is to make up the work missed under supervision of a regular or a class teacher. In order to remove the cause of such loss of time the teachers should often

communicate with parents (communication blanks, parents' evenings).

§ 19. The rules of government for the preservation of order during schooltime can be divided into special and general rules. The teacher should usually try to get along with the general rules.

In ascending order the general rules are:—

- (a) To stop instruction.
- (b) To tap on the table.
- (c) To warn the whole class or a whole bench.
- (d) To censure and threaten pupils without naming them.

Special rules are:—

- (a) Sharp look and motion with the hand.
- (b) Speaking to the pupil.
- (c) Threat of punishment and naming the pupil.
- (d) To have the pupil leave his seat and stand aside or in the background. In such cases, however, attention should be paid to the pupil's attitude.
- (e) Personal report to the teacher concerned or to the regular teacher.

§ 20. In inflicting punishments the ascending steps should be followed by the teacher. No step may either be overlooked or repeated. If a punishment has been threatened, it should really be given in case of a repetition of the offense. Exclusion from the class, or standing outside the door, or corporal punishment is not permitted.

§ 21. It is not allowed to keep pupils in school as a means of punishment. If the pupil, however, misses part of the instruction through his own fault as well as on account of tardiness, he should be punished by being required to do the work after school-time.

§ 22. If several pupils cannot accomplish the same work, they may not be punished, but a more thorough, methodical treatment of the material should be introduced; the teacher should always first seek within himself the reasons for the mistakes made.

§ 23. If the home work is neglected, the punishments should always be graded. Before the next lesson period the pupil must appear with the deficient work done; that is to say, he must recite the lesson or present the work to the teacher outside of school or do the work after schooltime under personal supervision of the teacher.

§ 24. It is just as wrong to give special work hours as punishments as it is to make pupils copy too often badly done home work, although it is quite appropriate to inculcate the right form by requiring the pupil to copy the written work two or three times if this result cannot be reached otherwise.

§ 25. If the pupil has forgotten to bring something which is needed in instruction and during a lesson, he should show the teacher before the next lesson what he needs for the lesson, and if the forgetfulness occurs again, he must do the same for some time, before each lesson. In order to train the pupils in orderliness, the class teacher must, from time to time, inspect the books. Special attention should be given that the pupils do not bring to school books or copy books which they do not need.

§ 26. Wherever absences and breaches of order and customs violate standing rules and arrangements, the latter are to be expressly called to the attention of the pupils.

§ 27. Unbecoming, untimely questions and manifestations of doubts must be put aside without further discussion. Questions and doubts which the children do not ask for their instruction, but only to embarrass the teacher, injure his authority. Teachers can sometimes refer during the lesson or during conversation to these questions and show the pupils how wrong or how irrelevant they were.

2. *Punishments for discipline.* — The second group of punishments are those for discipline. By them the pupil's mind is to be influenced indirectly. In such cases, more important than the correction of mistakes and the watching out for the violation of rules and for punishments are positive means for sharpening,

warning, and stimulating the moral judgment, such as free conversations, frequent discussion of events from the moral point of view, and encouragement to put into action worthwhile ideas; for instance, in the form of thankfulness, pity, and affection.

§ 28. If rules have been violated, the following facts should be considered: the teacher must learn the facts without any kind of force; by no means, however, should this be done through one inquiry only, because the boy only too easily escapes such inquiries through quick falsehood. The teacher should beware of getting a false notion of the facts through a mistaken construction of what has happened. He should not be influenced against the offender by previous misdoings or by accompanying circumstances.

§ 29. The punishment should correspond to the offense and may be raised to corporal punishment, which, however, may only be given by the class teacher concerned. Discussion of the case before the class is to be regarded as a special punishment.

§ 30. In general the following points should be considered: the principal rule for all punishment is that it must be proportionate to the offense. It must be given without passion, with the necessary moral earnestness; but cold discipline may not be substituted for affectionate treatment.

§ 31. The punishment must lead the pupil to a recognition of his mistake. His comrades must also be made to feel that the punishment is just.

Leipsic. — For fifty years Leipsic has been prominent as the home of pedagogical seminars. The first one, founded by Ziller as a private enterprise in 1861, was modeled after the seminar at Jena and, like it, was conducted on Herbartian principles in both theory and practice. Its purpose was the training of teachers and school officials, and the advancement of pedagogical

science. Students were required to spend one year hearing lectures in the philosophical sciences — logic, psychology, aesthetics, metaphysics, ethics, philosophy of religion, and the history of pedagogy — before they entered the seminar. They then spent one year in observation, practice teaching, and criticism of the work done. The total number of hours required did not exceed five per week, but at least two hours of teaching in the practice school were necessary. The practice school was under the immediate direction of three well-trained candidates; one chosen from the field of theology, the second from that of philology, and the third from that of mathematics. These teachers taught in the school and supervised the practice teaching under the general superintendence of the director. The school consisted of three classes, with six boys in each, the lowest representing the *Volksschule*, in the years from six to nine; the second the *Realschule*, in the years from nine to twelve; and the third the *Gymnasium*, in the years from twelve to fifteen. The pupils were taken from a philanthropic institution and received nine years of schooling. All the work was carefully criticized, and the results were recorded for the benefit of pedagogical science. There were three weekly gatherings of the students: the theoreticum, the praticum, and the conference. The first was devoted mainly to the presentation of reports by students upon some educational topic,

usually theoretical. Voluntary efforts in this direction were strongly encouraged. Two half-hour practicums were held each week. They consisted of trial lessons given by a student in the presence of all the other members of the seminar. He must have made careful preparation for this lesson under the supervision of the director or the regular teachers. The conference was devoted to discussion and criticism of the trial lessons and to a consideration of school facilities in general. The director gave the final word on all these occasions. Ziller's seminar, always a private institution, continued until the death of the founder in 1882. After that time the theoretical part of it was continued through the pedagogical society, which still survives, but the practice school disappeared.

Two other seminars, also private efforts, have been conducted by university professors. Dr. Strümpell, associate (*ausserordentlicher*) professor of philosophy and pedagogy, directed one, the special purpose of which was the application of psychological principles to education. The members consisted, for the most part, of teachers from the *Volksschulen* who were preparing for higher positions. The other, which still exists, is led by Dr. Hofmann, professor of theology. The purpose of this is, by means of lectures and the industrious visitation of schools of all kinds, to give theological students an insight into the different parts of the German educational system. It has special value because of the

fact that clergymen, particularly those in the rural districts, have much responsibility in school affairs.

There are now at Leipsic two pedagogical seminars which stand in official connection with the university,—a philosophical-pedagogical seminar, led by Professor Volkelt, and a practical-pedagogical seminar, directed by Professor Jungmann, who is also rector of the Thomas *Gymnasium*. The former, holding weekly sessions of two hours each, is devoted to the consideration of educational questions from the broadly philosophical point of view. The latter, holding weekly sessions of two hours each in the *Gymnasium*, is devoted to visiting the classes of experienced teachers, practice teaching by students, and criticism of the work done. Professor Jungmann is assisted by teachers in the *Gymnasium*,—Dr. Hartman, who conducts the work in English and French, and Dr. Lehman, who is in charge of mathematics and the natural sciences. Professor Jungmann himself directs the work in Latin, Greek, and history. Students visit the classes of these teachers, and occasionally teach classes under their supervision. Some students take the work for a single semester, others continue it for two or three semesters. The work of these seminars is elective, as are all other courses in the university, but an increasingly large number of students attend them.

The official regulations of the practical seminar are as follows:—

“§ 1. The purpose of the seminar is to instruct its members in the application of their scientific learning to practical teaching in the higher schools.

“§ 2. The seminar stands in connection with a *Gymnasium* in Leipsic. The director or a teacher of the *Gymnasium* has the leadership of the seminar and at the same time the authority to give instruction in pedagogy in the university. For the direction of special exercises in particular subjects, two other teachers in the *Gymnasium* or *Realgymnasium* are associated with him, so that three subject groups are formed which include, as a rule, the ancient languages, the modern languages, and mathematics and the natural sciences. The *Gymnasium* places pupils, equipment, and rooms at the service of the seminar.

“§ 3. The exercises of the seminar consist in so-called model lessons; in practice teaching by the members, who are assigned to this work on the basis of written lesson plans; in general discussion of these lessons; in other didactical and pedagogical discussions; and in the visitation of planned periods of instruction in the *Gymnasium*.

“§ 4. Students of academic subjects that are required for the position of teacher in the higher schools, can become members of the seminar after they have pursued their studies some time, as a rule at least four semesters, or, if they attend the university under the provision of June 1, 1865, two semesters. Students who have not fulfilled these conditions may be admitted as hearers. In either case the applicants are required to introduce themselves personally to the director of the seminar and to the leader of their particular subject group.

“§ 5. The members of the seminar are required to attend regularly the general sessions as well as the meetings of their own subject groups, and to take part in the exercises, especially in the practice teaching. The frequent visitation of other subject groups is urgently recommended.

“§ 6. For the members of the seminar a number of scholar-

ships have been established in the assignment of which residents of the kingdom of Saxony are given the preference. These scholarships are assigned at the close of the semester by the director in accordance with the decision of the leaders of the seminar, on the basis of the work done in the seminar and the attendance upon the different groups. In case a scholarship is given to a person who has also received one of the scholarships granted by the Ministry of Public Instruction, or to a person who has also the scholarship granted to the holder as a member of the philological seminar, it is reduced to half the usual amount.

“§ 7. The members have a right to the use of the seminar library.

“§ 8. Upon his departure from the seminar every member can demand a certificate, which is to be given by the leader of the subject group and countersigned by the director. These certificates must be affixed to the petition to the Royal Ministry of Public Instruction when the candidates are admitted to the *Probephjahr*.

“§ 9. The director is required to present to the Royal Ministry at the close of each semester a list of the members and hearers of the seminar and a short report concerning the work of the seminar.

“§ 10. Every member receives a copy of these rules upon entering the seminar.”

THE GYMNASIAL SEMINAR

A. The Royal Pedagogical Seminar in Berlin was the first gymnasial or higher school seminar established with state funds and managed directly by the state. As has been said, the Minister of State, von Zedlitz, tried in vain to establish at Halle an institution that should have as its particular object the training of teachers for the higher

schools along distinctively pedagogical lines. Schutz accepted a call to Jena, Trapp failed in his efforts, and Wolf insisted successfully upon changing the pedagogical seminar into a philological seminar. Von Zedlitz was not to be baffled in his purpose, however, and the same year that the pedagogical seminar disappeared at Halle, Friederich Gedike, director of the *Fr. Werder'sches Gymnasium* in Berlin, a very able and much-honored schoolman, received from the *Oberschulkollegium* an invitation to draw up plans for the "establishment of a free institution for school teachers in the higher schools."

The seminar was opened in connection with Gedike's school. Fries writes concerning it:—

"Its purpose was stated as the training of experienced and skillful teachers for *Gymnasien* and Latin schools, consequently the instruction was to be both theoretical and practical. This instruction would be gained through a study of pedagogical treatises and the best writings on schools and education, which should be furnished by the library to be established in connection with the seminar; and also through the visiting of classes and practice under the supervision of the director and according to his assignment. The greatest possible regard for *gymnasial* instruction was shown. For the practical training of the candidates the further assistance of three talented, experienced, and trained teachers was provided. The seminar was open to young men who had already finished their studies. They were accepted after examination and the giving of a trial lesson. Gedike himself would have admitted also candidates who had finished the *Gymnasium* with honor but had not yet attended the university. These he would have

trained to give instruction in the lower classes; indeed he proposed that graduates of the *Gymnasium* who showed unusual inclination and talent for teaching should be trained for their future calling by means of actual practice.

"The seminar was established at Easter, 1788, and later in the year it was given fixed form through a particular bill of instructions. According to this the members of the seminar were required to produce a pedagogical essay every three months, the subject to be chosen by themselves but to stand in the closest possible relation to their own practice. These essays were read and criticized in the monthly sessions. Written opinions concerning each were read at the following session. This method of treatment was very thorough, but it required too much time to carry it out; because the sessions, in which the assistants of the director and all the regular teachers of the school took as much part as they desired, were occupied with other subjects also; as, for example, new pedagogical publications and reports concerning school examinations and school regulations. The candidates visited the classes of the director and other teachers of the institution as well as one another's classes. They had ten hours of teaching, in subjects which changed every half year. They stood subject to order in case of inspection, substitution, or necessary absence of the director, and they served as official advisers of the classes in which they gave instruction. As the instructions contained pedagogical advice which was purposeful and based upon intelligent experience, the candidates found special opportunity for exercise in training in the fact that they were assigned as tutors to such pupils as stood in need of general oversight and particular care on account of disorder, inattention, or laziness. The budget of the institution amounted to one thousand thalers [about \$750], from which each candidate received a stipendium of one hundred and twenty thalers. Even though the introduction to theory stood somewhat in the background, on the whole, the institution was effective, and it soon won so much regard and confidence that

several candidates were called directly from the seminar to important official positions."¹

This seminar still exists, although in 1869 its direct leadership passed to the provincial school board. It may be taken as typical of a group of about a dozen higher-school seminars whose immediate direction is vested in a member of the provincial school board. In such seminars the candidate receives his theoretical instruction from the director of the seminar and his practical training under the supervision of the director of the higher school in which he teaches. The work itself is practically the same as that done in the ordinary gymnasial seminar in which the director of the school is also director of the seminar.

B. The Seminarium Præceptorum, at Halle, is an excellent example of the more common type of gymnasial seminars. It was originally established by August Hermann Francke (1663-1727), the illustrious founder of the *Franckesche Stiftungen* in that city. Francke was both a prophet and a path-finder in the field of education. While serving as professor of theology in the university and pastor of a church in the suburbs of the city, he found additional outlet for his indomitable philanthropic energies in the founding, in 1695, of a free school for poor children. This was followed by the establishment in quick succession of a school for the children of the middle classes, 1695;

¹ Fries, W., *Die Vorbildung der Lehrer für das Lehramt*, 50.

an orphanage, 1695; a Latin school (now a *Gymnasium*), 1697; two boarding homes for pupils, 1696 and 1697; a bookstore and a drug store, 1698; a book bindery, 1701; a mission association, 1705; a fund for the care of young women, 1706; and a fund for the printing and distribution of Bibles, 1710. All these institutions were placed together under one management on a tract of land containing about forty-five acres and lying near the center of the present city of Halle. Since Francke's death, there have been added a city choir, 1808; an *Oberrealschule* and a higher girls' school, 1835; a *Vorschule* for the *Gymnasium* and *Oberrealschule*, 1845; and more recently a seminar or normal school for the training of female teachers, and a gymnasial seminar for the training of male teachers for the higher schools. The total enrollment of pupils in all the schools is now about thirty-three hundred.

At its beginning, this institution had an endowment of only seven gulden, the gift of an unknown friend; but it had rare treasures in the faith and executive ability of its founder. The monument erected to Francke's memory on the school grounds bears the significant words, "He trusted God." Both his faith and his works so appealed to men of wealth that means was not lacking to carry out his constantly enlarging plans. It was not so easy, however, to secure teachers of suitable character and training. With real constructive genius Francke set about training teachers both for his schools and for others. The means

at his command enabled him to provide a free table for impecunious young men of ability who were willing to devote themselves diligently to preparation for the work of teaching. Others came who were able to support themselves. All were required to pledge themselves to spend five years in preparation for their work. In 1706 there were seventy-two members of the *seminarium præceptorum*, and in 1709 about ninety. It was soon learned, however, that many of these candidates for the teaching office were poorly prepared for their work and showed little promise. Consequently, in 1707, Francke divided the seminar and formed what he called the *seminarium selectum præceptorum* whose members, showing greater ability than the others, he desired to train for positions in the gymnasial schools. The training given these men was of two kinds, academic and practical. The former consisted in the study of subject matter, mainly the languages. Particular emphasis was placed upon the mastery of the Latin language for conversational use. The candidates were given opportunity to acquaint themselves thoroughly with the actual work and problems of the school. Instruction in the principles of teaching and the observation of good teaching preceded actual practice. At one time there were two inspectors who did no teaching themselves but spent their time directing the observations and practice teaching of the candidates. Weekly meetings were held for the discussion of observations and

practice teaching. The seminar stood in very close connection with the Latin school or *Gymnasium*. It was so prosperous that in 1715 a house was built for the use of candidates as a home.

But the movement was ahead of its time. The regular university triennium was usually regarded as long enough in which to prepare for the work of teaching, and young men became unwilling to pledge themselves to attendance upon the seminar for five years. Before Francke's death the attendance had considerably decreased, and in 1779 the seminar was discontinued entirely.

The modern *seminarium præceptorum*, or gymnasial seminar of the *Franckesche Stiftungen*, was established in 1881. In the nearly two centuries that had elapsed since the founding of the first one by Francke, official opinion concerning the necessity and the methods of training teachers for the higher schools had advanced. For more than a half century the candidate had been required to spend one year in trial teaching after three years' study at the university. Dr. Otto Frick, who became director of the *Franckesche Stiftungen* in 1880, brought to the position a breadth of scholarship, force of character, wealth of experience, and zeal for the work of the teacher that peculiarly fitted him to become the second founder of the *seminarium præceptorum*. The work was undertaken as a private effort and was carried on so efficiently and vigorously that it soon became a powerful influence in

determining the course of teacher training in Prussia. Fries says that "from here went out the impulse for the establishment of the Prussian gymnasial seminar."¹

In his plans for the seminar, Frick assumed a knowledge of subject matter on the part of the candidates, since the three years' study at the university, followed by the state examination, provided for that, and he devoted his efforts to training along pedagogical lines, both theoretical and practical. The former consisted of a study of general and special pedagogy with an introduction to pedagogical literature. The latter consisted of the observation of good teaching, the preparation of lesson plans, practice teaching in the *Gymnasium* and *Realgymnasium*, and the discussion of both theoretical and practical questions under the leadership of the director. Frick made much use of the *Volksschulen* and *Bürgerschulen* for purposes of observation, as he believed that in them the problems of method could be better studied than in the higher schools. The modern gymnasial seminar, which now exists throughout Prussia and to a considerable extent in other German states, owes much to the practical work and the writings of Frick from 1881 to his death in 1892. In 1884 Frick and a colleague founded *Lehrproben und Lehrgänge*, a quarterly magazine devoted to a discussion of the problems connected with the training of teachers for the higher schools, and this is continued under the management of his successor.

¹ Fries, W., *Die Vorbildung der Lehrer*, p. 69.

With this brief historical sketch we pass to a somewhat more detailed account of the *seminarium præceptorum* or higher school seminar as it exists at Halle to-day. The description is based upon observation, made during six months' attendance upon the meetings of the seminar and rather close association with the director and its members.

The director is the most important factor in the success of a pedagogical seminar. Dr. Wilhelm Fries, director of the *Franckesche Stiftungen* and of the seminar since 1892, is a worthy successor of Frick and Francke. He was born at Landeshut in Schlesien, October 23, 1845, and received his university preparatory training in the *Gymnasium* at Schweidnitz. In the University of Breslau he studied classical philology, German language and literature, and history, receiving the degree of doctor of philosophy in 1870. His *Probeyahr* was spent in Breslau. He was appointed as regular teacher (*ordentlicher Lehrer*) and librarian in the *Gymnasium* in Bielefeld, and later as teacher (*Oberlehrer*) in the *Gymnasium* in Barmen. In 1880-1881 he was director of the *Gymnasium* at Eutin. From 1881 to 1892 he served as director of the Latina (*Gymnasium*) of the *Franckesche Stiftungen* and as codirector of the *Franckesche Stiftungen*. Since 1892 he has been director of the *Franckesche Stiftungen*, since 1895 director of *Wissenschaftlichen Prüfungscommissionen* for teachers in the higher schools, and since 1897 professor of pedagogy in the university of Halle. In 1898

he received the degree of doctor of theology from the university of Halle and also the title *Geheimer Regierungsrat*.

In a career largely occupied with executive duties Dr. Fries has yet found time for much writing. In the field of Latin and Greek, the subjects in which he specialized in the university and which he taught in the *Gymnasium*, he has written: *Neubearbeitung der lateinischen Grammatik von Ellendt-Seyffert*; *Lateinisches Übungsbuch für alle Klassen*; *Das Memoriren im lateinischen Unterricht, Programm*, Eutin, 1881; many articles in *Neue Jahrbücher*, in *Zeitschrift für Gymnasialwesen*, and in *Lehrproben und Lehrgänge*; *De anacoluthis Sophoclis*, Breslau, 1871; *De casibus absolutis qui dicuntur*, Bielefeld, 1875; *Neuausgabe von Arnold, Die griechischen Studien des Horaz*, 1890; *Schulausgabe von Caesar Bellum Gallicum*, 1902. His pedagogical writings include the following: *Die Vorbildung der Lehrer für das höhere Schulamt*, Munich, 1895 (new edition in preparation); many articles in *Zeitschrift für Gymnasialwesen*, in *Lehrproben und Lehrgänge*, in Lexis' *Das deutsche Schulwesen*, and in *Die Reform des höheren Schulwesens*. Historical writings in connection with the Franckesche Stiftungen include Francke's *Grosser Aufsatz*, Halle, 1894; *Die Franckesche Stiftungen in ihrem zweiten Jahrhundert*, Halle, 1898; articles in *Lehrproben und Lehrgänge*, and in *Encyclopädisches Handbuch der Pädagogik* by Rein. He is principal editor of *Lehrproben*

und Lehrgänge, a quarterly magazine which is the leading publication of its kind in Germany.

Dr. Fries impresses the observer as a dignified, courteous gentleman, at once scholarly and military in spirit and bearing. His white hair and beard give him a venerable appearance; but his quick, firm, elastic step, his appreciation of the humorous, and the vigorous energy of his mental faculties show that he is still young. In a very important sense he brings to his position the experience of many years without age. He is a product of classical training in *Gymnasium* and university, and he stands for the spirit of discipline which that training represents. A true Prussian, he would drill boys in school as soldiers are drilled in camp, but this dominant characteristic does not prevent an appreciation of youthful weakness and human sentiment. His attitude towards the candidates in his seminar is that of the friendly but frank German official who is responsible for the sharp correction of errors. He knows the details of school work in all classes of the schools under his direction. For many years he has been actively interested in the various problems of school organization and administration as well as in the actual work of the classroom. Highly esteemed in his own school and community, and prominent in the educational councils of the state, he stands among the foremost of those scholarly, capable men who are so efficiently directing the practical training of future teachers in the German higher schools.

The members of the seminar are nine men who have passed the state examination (*Staatsexamen*). Five of them have also received the degree of doctor of philosophy, and part of the others are working towards it. Of these men it may be said in general that they are of good presence, strong and energetic both physically and mentally, courteous and agreeable in manner. The following facts concerning each will enable the reader to understand better the personnel and the work of the seminar.

Numbers 1 and 5, as given in the table, have performed the required year of military service.

Number 2 first prepared himself for the work of a practical chemist, but changed to the profession of teaching because it seemed to offer better chance for promotion.

Number 3 taught one year in a private school before passing the state examination.

Numbers 1, 4, 6, 7, and 8 are assistants (*Erzieher*) in the boarding homes of the *Franckesche Stiftungen*.

Number 9 served about twenty years as a pastor before passing the state examination for the position of teacher in the higher schools. Besides the two hours of teaching which he does in the *Oberrealschule* of the *Franckesche Stiftungen*, he teaches thirty-six hours per week in private schools of the city. He will be ready for appointment at the close of the *Seminarjahr*, having been specially excused by the Minister of Education from serving the usual *Probeyahr*.

CANDIDATES IN SEMINARIAHR

CANDIDATE	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9
1 Age at beginning of <i>Seminariahr</i> .	25½	29	26½	23½	26½	25	24	25	43
2 Preparatory school	Gymnasium	Realgymnasium	Oberreal-schule	Realgymna-sium	Oberreal-schule	Oberreal-schule	Oberreal-schule	Oberreal-schule	Gymnasium
3 Number of semesters in university	10½	11	8	12	10	11	8	8	
4 Number of years between <i>Abiurientenexamen</i> and <i>Staatszulassung</i> .	5½	9½	7	6	6	5	5½	5	25
5 Principal subjects	Latin Greek History	Chemistry and Mineralogy Botany and Zoology	English	French English Philosophy	Pure mathematics Applied Mathematics Physics	History Geography Philosophy	Mathematics Physics Chemistry and Mineralogy	Hebrew German English Religion	
6 Secondary subjects		Physics	Geography	Religion	Chemistry and Mineralogy			Geography	French
7 Doctor of philosophy . . .	No	Yes	No	Yes	Yes	Yes	Yes	No	No
8 Subjects which candidate is now teaching, with number of hours in each	Latin 8 History 2 Geography 1 German 5	Chemistry 4 Botany 20	German 3 Latin 8 Gymnastics 3	German 9 French 6 English 5	Arithmetic 8 Algebra and Geometry 9	History 4 Geography 3 German 3	Mathematics 6 German 3	German 5 English 2 Geography 6 Religion 1	

The pedagogical studies, including psychology and philosophy, pursued by these candidates while they were in the university, are reported as follows. The figure following the subject indicates the number of hours per week during one semester:—

No. 1. Introduction to the pedagogical classics of the eighteenth century, 1; discussion of Herbart's outline of pedagogical lectures, 1; discussion of Rousseau's *Emile* and Locke's *Some Thoughts on Education*, 1; history of the Prussian school system, 1; history of pedagogy, 1; the problem of immortality in the history of philosophy, 1; Christianity and the theory of evolution, 1; logic, 4; psychology, 4; history of philosophy of the nineteenth century, 2; exercises in Plato's *Phædo*, 1.

No. 2. History of philosophy, 3, 2 semesters; psychology, 2; pedagogical exercises, 1.

No. 3. Introduction to philosophy, 2; selected chapters from the history of ancient philosophy, 2; history of philosophy, 4; logic, 4; psychology, 4; introduction to æsthetics, 2; introduction to the pedagogical classics of the eighteenth century, 2; history of pedagogy, 2.

No. 4. History of pedagogy, 1.

No. 5. Introduction to philosophy, 1; logic, 2; history of philosophy, 3, 3 semesters; psychology, 3; history of pedagogy, 1; philosophical exercises, 2, 3 semesters; ethics, 2; general pedagogy, 2; pedagogical seminar (Jena), 3; philosophy of religion, 1.

No. 6. History of pedagogy, 4; history of modern pedagogy, 2; history of philosophy to Kant, 4; history of modern philosophy, 4; psychology, 4; logic, 4; the freedom of the will, 2.

No. 7. History of philosophy, 5, 2 semesters; psychology, 3; Kant and his philosophy, 1; logic, 2; introduction to philosophy, ; history of pedagogy, 2; introduction to pedagogical classics, 2; selected chapters in didactics, 2.

No. 8. Plato and Kant, 2; introduction to the pedagogical classics of the eighteenth and nineteenth centuries, 2; history of pedagogy since the Middle Ages, 2; introduction to the pedagogical classics of the nineteenth century, 2.

No. 9. History of philosophy, 6, 2 semesters; Kant 4; Rousseau, 2; psychology, 4; pedagogy, 3, 2 semesters.

As representative of the amount of university training received by these candidates in the subjects which they have prepared themselves to teach, the following lists of lecture courses are given. The German university student is absolutely free in the choice of the lectures that he attends; consequently he usually pursues those subjects in which he is most interested, and those which may be of future use. Roughly speaking, the courses named below may be said to constitute about three fourths of the whole number of courses attended by these students during their university course. Candidate

number 1 represents the ancient languages and history, number 3 the modern languages and geography, and number 5 mathematics and the sciences.

No. 1. *Latin*.—Latin grammar, 4; history of Roman historiography and interpretation of the *Annals* of Tacitus, 4; philological prose seminar (exercises in writing and speaking Latin and in grammatical repetitions), 2, 2 semesters; Latin etymology and theory of words, 1; Catullus, 2; antiquities of the Roman state, 3; Tacitus's *Germania*, 2; prosody of the Greeks and Romans, 3; Horace, 2; Cicero's life and works with interpretation of the second book of *De legibus*, 3; outlines of Latin syntax, 3; interpretation of Plautus's *Miles gloriosus*, an introduction to old Latin language and prosody, 2; Juvenal, 2; philological seminar, interpretation of Varro's *De lingua Latina*, Book V, 2.

Greek.—Interpretation of selected choruses (*Chor gesänge*) of Sophocles as an introduction to the art form of the Attic tragedy, 3; philological pro-seminar, interpretation of selected shorter orations of Lysias, 2; history of Greek poetry, 3; antiquities of the Greek state, 4; Aristophanes's *Birds*, 4; philological pro-seminar, interpretation of Æschylus's *Prometheus*, 2; Thucydides, 4; introduction to Greek comic poets, 1; Greek syntax, 3; Euripides, life and interpretation of his works, 4; Plato's *Cratylus* as an introduction to scientific etymology, 1; Homeric accidence, 3; Demosthenes's *Oration against*

Leptines, 2; Plato's life and writings and interpretation of the *Symposium*, 4; Greek grammar, 4; philological seminar, interpretation of Hesiod's *Works and Days*, 2; Greek dialects, 4.

History. — Sources of German history to the end of the Middle Ages, 4; general history in the period of the Anti-reformation and the Thirty Years' War (1555-1648), 4; modern history since the Thirty Years' War, 4; Prussia's fall and rise in the time of Bonaparte, 1; history of the Roman imperial age, 4; Greek history, Part I, 4; history of the German constitution, 4; introduction to ancient history, 2; historical seminar, 4, 8 semesters.

History of art. — Homeric statuary, 1; Olympia, 1; sculptors of the Italian Renaissance, 1; history of Greek art in the Hellenistic period, 2.

No. 3. *English*. — Modern English literature, 4; the present-day English novel, 2; historical grammar of the English language, 4; modern English prosody, 2; exercises of the English seminar, 2, 7 semesters; life and works of Chaucer, 3; interpretation of Byron's *Childe Harold*, 2; history of Middle English literature, 3; interpretation of *Beowulf*, 2; course in phonetics for the practice of English and French pronunciation, 2; history of Old English literature, 3; life and works of Shakespeare, 3; introduction to the Scottish dialect, 2; exercises (speaking and writing) in Modern English, 2, 4 semesters; pronunciation and orthography of Modern English, 2.

French. — Phonetics and accidence of vulgar Latin, 5; historical grammar of the French language, 5; interpretation of old French poetry, 2; outline of French literature from the beginning to the Revolution, 5; interpretation of *Aucassin et Nicolette*, 2; romance pro-seminar, 2, 6 semesters; history of French literature since the Revolution, 5; exercises in speaking and writing the French language, 2, 6 semesters; *Les rapports littéraires entre la France et l'Allemagne*, 2; selected chapters from French syntax, 2; Molière, —; French pronunciation and its development, 4; French prosody and (popular) epic poetry, 5; *Les grands classiques français*, 2.

Geography. — Distribution of land and water, 2; Europe (except Central Europe), 4; recent results in geography and ethnology, 1; exercises of the geographical seminar, 2, 7 semesters; general geography, 7; Northern Central Europe, 2; methodics of geography, and of geographical instruction, 2; geographical conference, 2, 3 semesters; history of the development of the earth and its inhabitants, 2; Australia, America, Africa, 4; Darwinism, especially applied to the development of peoples, 2; commercial geography, 2, 2 semesters; map making, with practical exercises, 2; geography of Europe, 3; Asia, 3; Southern Central Europe, 2; selected chapters in anthropography, 2; topographical and geographical surveys, with practical exercises, 2; German" colonies, 2.

History. — History of the War of Liberation (1813—

1815), 3; history of Brandenburg-Prussia, 2; history of the German people, 4; history of the Middle Ages from the end of the twelfth century, 4; history of England, 2; history of Europe from 1648, 4.

No. 5. *Pure mathematics.* Differential calculus, 4; integral calculus, 4; analytical geometry, 4; theory of functions, 4; differential equations, 4; partial differential equations, 4; projective geometry, 4; algebra, 4; theory of numbers, 4; mechanics, 4; elliptic functions, 4; theory of time measurement, 2; selected chapters in analytical functions, 1; theory of quadratic forms, 2; division and quadrature of the circle, 2; mathematical approximation methods, 2; definite integrals, 4; calculation of variations, 4; infinitesimal geometry (theory of surfaces), 4; numerous exercises connected with seminar.

Applied mathematics. — Descriptive geometry, 4; popular astronomy, 1; history of Greek astronomy, 2; determination of time and position (theory and practice), 4; measurements of degrees or angles (triangulation), 1; methods of calculating adjustments (*Ausgleichungsrechnung*), 2; graphic statics, 4; technical mechanics, 4; dynamics, 4; elasticity and strength of materials, 4; exercises in surveying, mechanics, descriptive geometry, determinations of time and position, etc.

Physics. — Experimental physics, I and II, 5; practicum in physical institute, 6; theoretical optics, 4; theory

of electricity and magnetism (compare theoretical mechanics under mathematics), 4; electrical accumulators (*Akumulatoren*), special lectures, 1; kinetic theory of gas, 2; meteorology, 4; weather, light, and heat, 1; absorption and dispersion of light in crystals, 1; optical polarizing power (*Drehungsvermögen*) in crystals, 1; mathematical supplements of experimental physics, 2.

Chemistry and mineralogy. — Experimental chemistry, 5, 2 semesters; practicum in chemistry, 15–18, 2 semesters; mineralogy, 4; petrography, 4; crystallography, .

Unless excused for special reason the unmarried members of the seminar, including those in the *Probejahr*, are expected to live in the boarding homes of the *Franckesche Stiftungen* and to serve as assistants (*Erzieher*). Their duties include the special care of certain pupils and responsibility for the general good order of all pupils at all times. The needs of the institution seem to make this arrangement necessary, and the necessity offers to the candidates an opportunity to gain valuable experience in caring for boys as individuals as well as in groups. This service is peculiar to the *seminarium præceptorum*.

Visiting the classes of other teachers is an important part of the work of the *Seminarjahr*, especially in the early part of the year. The candidates may visit one another's classes. They are expected to visit the classes of the regular teachers of different subjects, and particularly those of teachers whose subjects are the same

as their own. Besides this individual visiting, the members of the seminar, in company with the director, visit twice per week in some class where arrangements for the visit have previously been made. These visits include the *Vorschule* and the *Mittelschule* as well as the higher schools. On these occasions the teacher is supposed to present a pedagogically correct lesson as far as the circumstances of the day permit. Sometimes he hands the written outline of his lesson plan to the director as the latter enters the room. Members of the seminar are supposed to take notes of what they see. Two members, a referent and a co-referent, are expected to report at length at the next meeting of the seminar, when the work of the hour is carefully criticized. At the beginning of the year the following outline, prepared by former director Frick, was given to the members of the seminar by the director as the basis for criticism of classroom teaching: —

POINTS OF VIEW FOR THE CRITICISM OF TEST LESSONS

- I. Choice and arrangement of subject matter.
 1. Did the quantity of matter stand in right relation to the time?
 2. Was the matter satisfactorily sifted and organized and correctly divided?
 3. Was the arrangement clear and transparent?
- II. Manner of treatment.
 1. Was a purposeful and systematic sequence of instructional activities (*Lehrh>tigkeiten*) observed? namely,

- a. *Preparation* for the new by association with the old and known.
- b. *Presentation* or development of the new.
- c. *Elaboration* (*Vertiefung, Begründung, Rückblick, Zusammenfassung*).
- d. *Application* (*Einübung, Einprägung*).
2. Was the subject clearly presented, logically developed, systematically elaborated, thoroughly practiced, and firmly impressed?
3. What about the formation and use of questions (especially of concentration questions) and their equal distribution among all pupils?

III. Personality of the teacher.

What was the carriage of the teacher? Was he fresh, inspiring, and lively in teaching? Did he govern the class by means of his eye and the strength and warmth of his voice in teaching? Was his language correct, articulate, distinct, succinct? Was his reading a model worthy of imitation? Was his whole bearing commendable?

IV. Discipline.

Did the teacher know how to keep the entire class busy all the time? Did he keep up the attention and interest of the pupils generally to an equal degree? Did he understand how to refresh attention and interest at the proper time by purposeful external means (pauses, having pupils rise, sit erect, speak in concert, and the like)? Had he eye and ear for the mistakes and misdemeanors of pupils, or were there many things which he did not notice at all and others to which he paid no attention?

V. Total impression and success of the lesson.

Was a distinct advance on the part of the pupils noticeable?

In this lesson did the teacher show distinct progress, independent understanding of the hints or suggestions given him, and careful observation of the same?

The candidates are required to do some teaching as part of the work of the *Seminarjahr*. The number of hours is not specified, and there is wide difference in practice. The teaching done by these candidates is indicated in the table. They have entire charge of the class, take their turn in the oversight of halls and playgrounds, attend the conferences of the faculty, and have all the rights and responsibilities of regular teachers as far as their relations to pupils are concerned; but their teaching is under constant supervision either by the director or by some teacher to whose care they have been assigned. It will be noticed that some of these candidates are teaching subjects in which they have not passed the state examination. This is occasioned by a scarcity of teachers for the subjects in which they are giving instruction. According to the regulations, the amount of teaching done by candidates in the *Seminarjahr* should be small, but practically it depends upon the number of candidates and teachers in the country at large. If the number is great, the number of hours assigned to each is proportionately small. If there is a scarcity of teachers, as there has been for some ten years, the number of hours assigned may nearly or quite equal that of a regular teacher. In case a candidate has full work, that is, twenty-four hours per week, he is usually given the rank of assistant teacher (*wissenschaftlicher Hilfslehrer*) and he is paid eighteen hundred marks, or about \$430 per year. He may be called upon for nine

hours per week without pay. For every hour above this number carried throughout the year he receives one hundred and ten marks, or \$26.40. Before he is admitted to the rank of candidate, every man must certify in writing that he has sufficient means for his support during the *Seminarjahr* and *Probejahr*. Most candidates receive from the state during the *Seminarjahr* a stipendium of about \$125, in addition to the amount received for teaching above nine hours per week; but when a candidate is paid as an assistant, he does not receive the stipendium given to those who teach a smaller number of hours.

Probestunden, or model lessons, are required of the candidates, and they are attended by the director and the other members of the seminar. The candidate is expected to give to the director before the hour a written outline of the work he proposes to accomplish. During such lessons the director sometimes corrects a false answer, insists upon sharper work by some pupil, or asks a question which discloses a weakness in plan or procedure, but the candidate is left free to work out his own plan. The work of the hour is afterwards criticized in the seminar meeting. Both the *Probestunde* and the hour of criticism are a severe strain upon the candidate most concerned.

All the work of the seminar is brought to a focus in the weekly meeting. The session, lasting about an hour and a half, is held in a comfortable room, where the director and the members sit round a table. According to the

German custom the candidates rise as the director enters the room, and remain standing until he is seated. The work of the session begins without further ceremony. It is likely to proceed in some such order as the following:

1. Reading of minutes of previous meeting.
2. Introductory remarks or announcements by the director and questions by the members.
3. Criticism of the teaching of candidates observed by the director since the previous meeting.
4. Criticism of model lessons or of *Probestunden*.
5. Reports upon assigned reading.

Minutes of each meeting are recorded, different members of the seminar serving in turn as secretary. In some seminars the minutes contain an exhaustive account of the proceedings. The character of those kept in this seminar is indicated by the following samples:—

“Minutes of the opening meeting of the *seminarium præceptorum*, April 14, 1909. — Director Fries opened the *seminarium præceptorum* at 10 A.M., April 14, 1909, and with handshake and signature pledged the candidates to the observance of their duties both inside and outside of the institution.

“Wednesday was fixed as session day, the sessions to begin at 11.10 A.M. in April and 10.10 A.M. after May 1.

“Friday and Saturday were fixed as the days for visiting classes.

“The director led in the discussion of the position and spirit of the teacher and the order of educational activities.

“As a guide for class instruction Director Fries distributed Frick’s outline, *Points of view for the criticism of test lessons*, and the first point, ‘The choice and arrangement of subject matter,’ was discussed.

"Director Fries then gave a short survey of the history of the establishment of seminars, with special reference to the seminar of the *Francesche Stiftungen*.

"For the work of the next meeting the consideration of Frick's point of view was assigned.

Fries.

Faltin.

"May 19, 1909.—All members present with Director Fries presiding.

"Director Fries discussed the exercise books in foreign languages submitted to him by Dr. R., Mr. J., and Mr. F., and advised the candidates to adopt the system of marking mistakes that is in use in the school concerned.

"Director Fries criticized the lessons of Dr. Re., Dr. Ro., Mr. W., and Mr. J.

"Dr. S. made a report on the treatment of Goethe's *Mignon* in the second class of the girls' *Mittelschule*. In the discussion following this report Director Fries recommended that the statement of the objective point be placed at the end rather than at the beginning of the lesson.

"Mr. W. discussed the geography lesson concerning German Southwest Africa in the first class of the same school.

"The visiting hours of the next three weeks must fail on account of the school excursion of the *Latina*, the Whitsuntide holidays, and the necessary absence of the director.

"The last part of the session was taken up with the report by Dr. S. on Matthias's *Praktische Pädagogik*, section 17, 'Language, spirit, manner, and humor in instruction'; section 18, 'The lecture'; section 19, 'The story and the art of story-telling.' In connection with this report Director Fries recommended Frick's essay, *The art of story-telling*.

"Dr. R. and Mr. H. are to report at the next meeting on Matthias's *Praktische Pädagogik*, section 6, 'The value of personality,' and section 7, 'The ideals and the realities of the profession.' The next assignment for reading is O. Willmann's *Didaktik als Bildungs-*

lehre, II, section 80, 'Articulation of the lesson content.' Dr. G. will serve as referent and Mr. H. as co-referent.

Fries.

Faltin.

"June 16, 1909. All present.

"Following a statement by Dr. R. concerning new books added to the library, Director Fries called attention especially to Schäpper's *Die Phantasie* and to Lampe's *Methode des geographischen Unterrichts*.

"Director Fries criticized a lesson in Latin grammar given by Mr. F.

"A short report was given by Dr. R. concerning the lesson in mathematics conducted by Professor S. in the fourth class of the *Oberrealschule*.

"A detailed discussion followed concerning a test lesson of Dr. S., the discussion consisting of self-criticism, general criticism, reply of Dr. S., and final criticism given by the Director.

"The next test lesson will be given on Saturday by Mr. F., subject, 'Latin grammar, in the fourth class of the *Latina*.' Mr. J. is named as referent.

"Mr. F. reported on section 78 of Willmann's *Didaktik*, 'The psychological moment.' In the discussion following this report Director Fries especially called attention to Lange's monograph, *Apperception*, and also to Willmann's book, *Aristoteles*, a new work in the series, *Die grossen Erzieher*, and to R. Lehmann's *Über den deutschen Unterricht*.

"The next report will be upon *Vorträge über die Hebung der geistigen Tätigkeit durch den Unterricht*. The first lecture will be discussed by Dr. S., co-referent Dr. R. ; the fourth lecture by Mr. W., co-referent Dr. G.

"Finally Director Fries called attention to the importance of pupils' reports and to the responsibility of those who make them; and he assigned for the next lesson a consideration of the two topics, 'Pedagogical tact' and 'The making of pupils' reports.' "

Fries.

Roegner.

The general remarks of the director may have to do with new magazines or books, some new order or regulation, a matter of local school organization, plans for visitation, or some other topic of current interest.

The director is likely to drop into the class of a candidate at any time. He then makes note of what he sees and reports upon it at the next meeting of the seminar. His criticisms are direct and practical and sometimes very severe. They concern such matters as the repetition of the pupil's answer by the teacher; loud, distinct speaking by both teacher and pupil; attention; discipline; the need of more force on the part of the teacher; the value of a cordial attitude of the teacher towards the pupil; the difference between mistakes in form and chance mistakes in writing a word in language work; the need of uniformity in the manner of marking mistakes by all teachers of any one school; the importance of rousing the imagination in some particular instance; methods of questioning pupils; the necessity of slow, accurate dictation, given but once; the necessity of accuracy in information given by the teacher supplementary to that found in the textbook; proper division of work through the semester; careful planning of each day's lesson with a view to variety; specific questions concerning method in the teaching of particular subjects.

Criticism of model lessons given by regular teachers is first presented by the referent appointed to report upon it.

He reviews the work of the hour, and points out defects and merits as they appear to him. The co-referent is asked to supplement this report, and then all the members have an opportunity to discuss the lesson and the points at issue. The discussion is usually closed by the director. The teacher is not present at these times.

Criticism of *Probestunden*, or model lessons, given by the candidates, is searching. The candidate who gave the lesson opens the discussion with a statement of his plan and a critical estimate of his own effort. This criticism is followed by that of the referent, co-referent, and other members. All are unsparing. One sometimes wonders whether they are meant to be as sharp as they sound to American ears. The candidate criticized has the right to reply at any time, to explain a situation, or to give his reasons for pursuing or attempting a certain plan. The director closes the discussion, emphasizing points stated by others or presenting new ones as he may choose.

The theory of pedagogy receives a fair share of consideration. At almost every meeting of the seminar an assignment of literature is made, to be reported upon at the next meeting. For this purpose a referent and a co-referent are named; the former to make the report, the latter to look out for omissions or misinterpretations. These reports are not written in full, but are made off-hand from notes taken in the reading. There is then general discussion of the subject matter under the leadership

of the director. The assignment for reading is not large, perhaps covering fifteen pages as an average. A certain fundamental knowledge of psychology and the history of pedagogy, especially of modern pedagogical theories, is assumed, and the material is taken almost entirely from the field of practical pedagogy. The principal works read were *Praktische Pädagogik*, by A. Matthias; *Die allgemeinen Bestimmungen für Volksschulen*, by Förster; *Didaktik als Bildungslehre* and *Pädagogische Vorträge über die Hebung der geistigen Tätigkeit*, by Otto Willmann. Reference was also made to *Handbuch der praktischen Pädagogik*, by H. Schiller; to *Zur Behandlung der Sagengeschichte*, by Frick; to *Ideale und Proteste*, by Schrader; to *Über den deutschen Unterricht*, by Lehmann; to several monographs, and to various articles in the educational magazines. Representative topics discussed were: the personality of the teacher in its relation to method; the art of questioning and the different kinds of questions; the principle of apperception; the Herbartian steps in teaching; pedagogical tact; interest; association between parents and teachers; effort or attainment as a basis for pupils' reports; correlation of subject matter; Ziller's recapitulation theory; selected topics in the history of modern pedagogy.

Towards the middle of the *Seminarjahr* a topic is assigned to each member of the seminar, upon which he is to write an essay for presentation to the director near the

close of the year. The candidates are asked to suggest subjects in which they are interested, and, if they are suitable, personal preferences are regarded in the assignment. The subjects for these essays are usually chosen from the field of practical pedagogy, and the papers are judged on the basis of individual independence of thought and maturity of judgment concerning the practical work of the school. Pure theory is to be avoided. This year's candidates will choose their subjects from the following list submitted by the director:—

Significance of the type in religious and historical instruction.

Apperception in instruction in the higher schools.

Pronunciation, reading, the lecture.

Memorizing in mathematical instruction.

How are lessons in poetry to be treated in order that the imagination and the feelings may be aroused?

Classroom instruction and home work in their mutual relations.

The use of praise and blame in instruction.

Different kinds of concentration.

The method of grouping in reviews.

What is meant by educative instruction and how is it attained?

Historical and geographical instruction of the middle classes in their mutual relations.

The use of drawing in different departments.

Stimulation and cultivation of the sense of honor.

Problems in the method of instruction in arithmetic.

Compulsion and freedom in instruction in the higher schools.

Relation of natural science instruction to other subjects.

How stimulate self-activity in pupils in the lower classes?

What points in the propositions for reform made by Perthes are to be applied in instruction in Latin?

The library is an important factor in the work of the seminar. In Halle, the university library is available for the use of candidates. In addition to this, and of more general use, is the library belonging to the seminar itself. This is not large, but it is well selected and very valuable for the purpose which it is designed to serve. It is composed of sample schoolbooks, monographs, and books of general pedagogy, the history of pedagogy, psychology, school systems, methods of teaching particular subjects and special educational topics. Several of the best educational journals, both German and foreign, are at hand. The custodian is chosen from among the candidates, and the members of the seminar have ready access to books and magazines.

Other Modern Seminars. — The work done in the gymnasial seminar of the *Franckesche Stiftungen* may be taken as typical of the best that is done in the higher

school seminars of Germany. Reports from other seminars indicate that differences in procedure are those due to differences in the personality and training of the directors, and in local conditions and facilities. A few directors admit the purely academic discussion of subject matter, but this policy has a small following. Some emphasize more the practical, others the theoretical side of pedagogical study. The spirit of the work as a whole depends almost entirely upon the director. In some cases the letter of the law is closely followed and candidates are admitted to teaching only after the first quarter, and then with a small number of hours. In other cases they are given from eight to twelve hours per week from the beginning. In still other instances they are given the full number of hours, twenty-four per week, at once. They are then practically independent from the start, for this state of affairs indicates a scarcity of teachers in the school, and no one has time to supervise their work carefully. Candidates sometimes complain because they are required to teach two years on probation, while at the same time they receive little assistance from their superiors. This rare condition, however, is due to unfortunate circumstances, and it is regretted by every one.

THE *PROBEJAHR*

The *Probejahr* has a history of its own, as shown in the preceding chapter, and it must be ranked as a separate

institution although it is intimately connected with the *Seminarjahr*. Before the establishment of the latter in 1890, it was scarcely more than a year of trial service with little supervisory assistance. Since the founding of the *Seminarjahr*, it remains a year of trial service, but the candidate receives more systematic attention from the school director or his representative, and he is required to submit a written report in which he criticizes his year's work. The candidate is under the immediate control of the director, who reports to the provincial school board concerning the character of his work. The *Probejahr* is usually spent in a school to which no seminar is attached.

In the *Latina (Gymnasium)* and *Oberrealschule* of the *Franckesche Stiftungen* there were, however, during the writer's sojourn there, three candidates serving their *Probejahr*. The training of these men and the teaching actually done by them is briefly indicated as follows: Number 1 passed his *Seminarjahr* in another seminar. He was teaching in the *Oberrealschule*, mathematics sixteen hours, physics two, and chemistry four, a total of twenty-two hours; and for this service he received a salary of \$430. Number 2 passed his *Seminarjahr* in another seminar. His principal subjects are Greek, Latin, and history. He was teaching in the *Latina*: Greek, six hours; Latin, eight; history, two; German, five; religion, two; geography, one; a total of twenty-four hours. He had the rank of scientific assistant and served as assistant (*Erzieher*) in one

of the boarding homes. For this service he received a salary of \$430 per year. His *Probejahr* was interrupted by the year of military service beginning October, 1909. Number 3, doctor of philosophy, passed his *Seminarjahr* in the *seminarium praeceptorum*, and was serving his *Probejahr* in the *Latina*. He taught mathematics eight hours and natural science six hours, receiving pay for five hours. He was also assistant (*Erzieher*) in a boarding home. His *Probejahr* was also interrupted by the year of military service, but he expected to return to the school in October, 1910, for the second semester.

The candidate in the *Probejahr* is not required to attend the meetings of the seminar or to do any particular reading, although he is supposed to make diligent use of his spare time for the latter purpose. His teaching receives less supervision than that of the candidate in the *Seminarjahr*, but he is still officially under the care of the director of the school. At the close of the year he is expected to make a report to the director concerning his work. This report may also contain a statement of his experience and impressions pedagogically considered. Should the director deem his work unsatisfactory, he so reports to his superior authority, the provincial school board (*Provincial Schulkollegium*). Towards the close of the year a special school inspector also visits the classes of the candidate and reports to the school board. Should the decision of the *Schulkollegium*, the final authority, be

against him, the candidate is either required to serve a second *Probeyahr* (or at least a semester) in another school, or he is finally refused a certificate as teacher in the higher schools. If the reports of the director and inspector are favorable, he will be certificated by state authority as higher school teacher (*Oberlehrer*), and he will then be ready for permanent appointment. A few years ago such persons had to wait from two to eight years for positions ; but, as teachers for the higher schools are now scarce in Germany, the new teacher is likely to be appointed at once.

CHAPTER IV

OPINION AND PRACTICE

A CENTURY of experience since the Prussian Edict of 1810 has not served to bring entire unanimity of either opinion or practice in all points connected with the training of teachers for the higher schools of Germany. A few things have been settled and universally accepted. The candidate must have completed his triennium at the university; he must pass a state examination in certain subjects in which every teacher should be reasonably proficient, and in certain other subjects, of his own choosing, which he desires to teach; and he must spend at least one year teaching on trial before he is officially admitted to the ranks of the professional teacher. Other points, however, remain somewhat unsettled, and, where they are involved, there is difference of practice. There is not yet entire agreement concerning the study of education as a university subject; concerning the value of the university pedagogical seminar as a means of training teachers for the higher schools; concerning the efficiency of the gymnasial seminar for the same purpose; and concerning the period of time that is necessary for the practical training.

A brief statement concerning opinion and practice with reference to these points follows.

The Study of Education occupies a somewhat uncertain position in German universities. It has not yet commended itself everywhere as worthy of recognition in a separate department. Perhaps the most interesting and surprising illustration of this fact is found in the decision, in 1908, of the universities of Munich, Würzburg, and Erlangen not to establish chairs of education or practice schools. The reasons for the decision given by the first two universities named are as follows:—

“1. Pedagogy as an isolated science is able to produce no creative, scientific work.

“2. Pedagogy as universal didactic presupposes in its representative universal wisdom. Since such a thing does not exist, an entire pedagogical faculty must be required for each university. Only under this presupposition does a special didactic of each subject have value.

“3. An introduction into the psychological principles of pedagogy can be given only by a representative of systematic philosophy who is particularly familiar with the methods of experimental psychology.

“4. For the pedagogical training of theological students existing institutions are sufficient.

“5. The practical training of future teachers for the middle schools (*Oberlehrer*) belongs to the pedagogical-didactical seminars of the middle schools (*Gymnasien*, etc.), that of the teachers for the *Volksschulen* to the teachers' seminars (*Lehrerseminare*); the university has for its purpose the advancement of the scientific and purely cultural training of students.

"6. The union of practice schools with the universities is opposed not only by considerations of principle, but by great practical difficulties as regards the personnel of teachers, the number of pupils, and local relations."¹

The university of Erlangen voted against the practice school, but recommended the appointment of a new professor of philosophy who should give lectures on pedagogy.

In those universities in which the study of education in some form has already been admitted, there remains considerable difference of opinion as to what work and how much can be profitably offered. Many who believe that the university should present the theoretical side of pedagogical training are opposed to the practical seminar or practice school, as a feature of university work. There are relatively few chairs of pedagogy. The courses in education are listed under philosophy in the official announcements, and most of them are given by professors of philosophy and psychology, who announce courses in education in alternate semesters or years.

The courses in education offered in the universities of Germany from Easter, 1907, to Easter, 1910 are indicated in the following list. The material for the first four semesters was collected by Mr. W. Donath, a student in the university of Jena, and it appeared in the magazine, *Aus dem Pädagogischen Universitäts-Seminar zu Jena*, edited by Professor William Rein. The writer is under obliga-

¹ *Aus dem Pädagogischen Universitäts-Seminar zu Jena, Heft XIII, 2.*

tions to both Mr. Donath and Professor Rein for the privilege of using this material. The data for the last two semesters was taken from the official lecture announcements issued by the different universities.

LIST OF COURSES¹

BERLIN

SS '07 Psychology. *Ach* (d): Introduction to psych. (2)
 Ethics. *Riehl*: Ethics I & II (1)
Simmel (a.p.): Ethics (2)
 Pedagogy. *Münch*: Ped. theories from Schleiermacher to
 the present (2)

WS '07-'08 Pedagogy. *Paulsen*: Ped. and didactics (4)
Münch: The educational office (2); Ped.
 conference *

SS '08 Psychology. *Paulsen*: Psych. the foundation of the spir-
 itual sciences (4)
Simmel (a.p.): Outlines of psych. (2)
Stumpf: Psych. institute *

Ethics. *Misch* (d): The principal problems of philosophy
 with special reference to individual and social
 ethics (2)

Pedagogy. *Münch*: Theory and art of language instruction (2)

¹ The rank of the lecturer has been indicated as far as it was possible to determine it from the announcement. If there are no letters after his name, he may be assumed to be a full professor (*ordentlicher Professor*); the letters (a.p.) indicate the rank of associate or assistant professor (*ausserordentlicher Professor*); the letter (d) indicates private lecturer (*privat Dozent*). SS '07 indicates summer semester, 1907; WS '07-'08, winter semester, 1907-1908. Courses marked with an asterisk (*) are supposed to have been offered in each of the six semesters.

Figures in parenthesis following the courses indicate the number of hours per week devoted to the work.

WS '08-'09 Psychology. *Stumpf*: Psych. with demonstrations (4)

Ethics. *Simmel* (a.p.): Ethics and problems in social philosophy (2)

Pedagogy. *Münch*: Ped. theory (2); Scientific ped. exercises (1)

SS '09 Psychology. *Simmel* (a.p.): General psych. (2)

Stumpf: Theoretical exercises in psych. institute (1); Experimental exercises in psych. institute (2)

Vierkandt (d): The soul life of primeval races (3); Exercises in race psych. (1½)

Ethics. *Simmel* (a.p.): Exercises in moral science

Pedagogy. *Münch*: Ped. theories from Plato to Rousseau (2); Scientific ped. exercises (1)

WS '09-'10 Psychology. *Stumpf*: Psych. with demonstrations (4); Theoretical exercises in psych. institute (1)

Stumpf and *Rupp* (d): Psych. institute (5)

Dessoir (a.p.): General psych. (2)

Rupp (d): Experimental exercises in psych. institute (4)

Frischeisen-Köhler (d): The psych. foundations of education (1)

Ethics. *Vierkandt* (d): Ethics (2)

Simmel (a.p.): Kant's ethics (1)

Groethuysen (d): Problems of modern culture (2); The law of nature and the historical school (1)

Pedagogy. *Münch*: The theory of instruction (2): Scientific ped. exercises (2)

Rupp (d): Discussion of exper. ped. in connection with lectures (1)

BONN

SS '07 Psychology. *Erdmann*: Psych. (4)
Herbertz (d): Experimental psych. of sight perception, especially in reading (1)

Pedagogy. *Wentscher* (a.p.): Ped. (2)

WS '07-'08 Psychology. *Dyroff*: Psych. (4)
Becher (d): Physiological psych. (1); Feeling and will (2)

Pedagogy. *Dyroff*: History of ped. (3)
Jäger: Gymnasial ped. II (2)

SS '08 Psychology. *Erdmann*: Psych. (4)
 Ethics. *Becher* (d): Principal problems in ethics (2)

Pedagogy. *Dyroff*: Seminar in Herbart

WS '08-'09 Psychology. *Dyroff*: Psych. (4)
Wentscher (a.p.): General psych. (4)
Erdmann: Exercises in the psych. of speech

Pedagogy. *Erdmann*: History of ped. (3)
Jäger: Gymnasial ped. II (2)

SS '09 Psychology. *Erdmann*: Psych. (4): Exper. psych. exercises in reading (1)
Verweyen (d): Exercises in the psych. of thinking (1)

Pedagogy. *Wentscher* (a.p.): Ped. (2)

WS '09-'10 Psychology. *Dyroff*: Psych. (4)
Becher (d): The psych. of will (1)
Kilpe: Psych. conference (2); Exper. psych. (6)

Ethics. *Hammacher* (d): Exercises in Compte's sociology (1)

BRESLAU

SS '07 Psychology. *Stern* (d): Child psych. and pedagogy (3)

WS '07-'08 Psychology. *Baumgartner*: Psychology (4)
Stern (d): Psychology (4)

SS '08 Psychology. *Stern* (d): Applied psychology (1)
 Ethics. *Stern* (d): Introduction to ethics (2)
 Pedagogy. *Stern* (d): History of ped. to the present (2)
 WS '08-'09 Psychology. *Stern* (a.p.): Psych. (4); Exercises in
 child psych. and exper. ped.
 SS '09 Psychology. *Baumgartner*: Psychology (4)
Stern (a.p.): Psych. of adolescence and its
 application to pedagogy (2); Psych. semi-
 nar (2)
 Ethics. *Kabitz* (d): Fundamental questions of ethics (2);
 Exercises in Kant's ethical writings (1½)
 WS '09-'10 Psychology. *Stern* (a.p.): Psychology (4); Exercises
 in the psych. of adolescence in psych.
 seminar (1½)
 Pedagogy. *Kabitz* (d): History of pedagogy in modern times
 (2); Exercises in theoretical pedagogy (1½)

ERLANGEN

SS '07 Psychology. *Hensel*: Psychology (4)
 Pedagogy. *Leser* (d): Prominent educators of modern times
 and their phil. and ped. views (2)
 WS '07-'08 Pedagogy. *Hensel*: Fichte (1)
 SS '08 Psychology. *Leser* (d): Psychology (4)
 Ethics. *Hensel*: Ethics (2)
 Pedagogy. *Leser* (d): Pestalozzi and Herbart (2)
 WS '08-'09 Pedagogy. *Leser* (d): Plato (2)
 SS '09 Psychology. *Hensel*: Psychology (4)
 Pedagogy. *Leser* (d): Views of life of great educators of
 modern times (2)
 WS '09-'10 Pedagogy. *Leser* (a.p.): Pestalozzi and Herbart, an
 introd. to the problems of ped. (2)

FREIBURG

SS '07 Psychology. *Uebinger*: Psychology (4)

WS '07-'08 Psychology. *Cohn* (a.p.): Psychology (4)*
Rickert: Psych. laboratory*

Ethics. *Rickert*: Ethics as social philosophy (1)

SS '08 Psychology. *Uebinger*: Psychology (4)

Pedagogy. *Cohn*: Psych. pedagogy (2)

WS '08-'09 Psychology. *Cohn*: Psychology (4)

Uebinger: The phil. letters of J. E. Erdmann (1)

Pedagogy. *Cohn*: The ends of education and instruction (2)

SS '09 Psychology. *Uebinger*: Psychology (4)

Bumke (d): Physiological psych. (1)

Cohn (a.p.): Psych. essays, by appointment

Pedagogy. *Uebinger*: History of pedagogy (2)

WS '09-'10 Psychology. *Bumke* (d): Physiological psych. (1)

Cohn (a.p.): Psychology, by appointment

Pedagogy. *Cohn* (a.p.): The higher school systems of the present (2)

Supple (d): School hygiene (1)

GIESSEN

SS '07 Psychology. *Groos*: Psychology (4)

Pedagogy. *Siebeck*: Principles of didactics and theory of method in instruction (2)

WS '07-'08 Psychology. *Groos*: Feeling and will in the child (1)
Kinkel: The idea and the life of the human soul

Pedagogy. *Siebeck*: History of education and pedagogy since the Middle Ages (3)

SS '08 Pedagogy. *Groos*: Outlines of pedagogy (2)

WS '08-'09 Psychology. *Groos*: Psychology (9)

Pedagogy. *Siebeck*: Outlines of didactics and methodology of instruction (2)

SS '09 Psychology. *Messer* (a.p.): Exercises in exper. psych.

Pedagogy. *Siebeck*: History of education and pedagogy since the age of Humanism (3); The nature, origin, and development of speech (2)

Groos: Pestalozzi, in philosophical seminar (1)

WS '09-'10 Psychology. *Messer* (a.p.): Psych. of will (1); Introduction to scientific works in the sphere of psych. and ped. (by appointment)

Ethics. *Weidenbach* (d): Ethics

Pedagogy. *Groos*: Outlines of ped. (2)

Messer (a.p.): Lectures on Natorp's social ped. (1½)

GÖTTINGEN

SS '07 Psychology. *Goedekemeyer*: Psychology (4)

Pedagogy. *Baumann*: History of ped. including curricula and lessons in the higher schools (3)

WS '07-'08 Psychology. *Müller*: Psychology (4)

SS '08 Psychology. *Baumann*: Outlines of ped. psych. (2)

Müller: Memory and the voluntary direction of thought (4)

WS '08-'09 Psychology. *Müller*: Psychology (4)

Ethics. *Husserl*: Fundamental problems in ethics (2)

SS '09 Psychology. *Müller*: Psycho-physical method (2); Exper. psych.

Pedagogy. *Baumann*: History of ped. (2).

WS '09-'10 Psychology. *Müller*: Psychology (4); Exper. psych. *Müller* and *Katz* (d): Exper. psych. (1)

Ethics. *Nelson* (d): Principles of ethics (4)

Pedagogy. *Husserl*: General history of pedagogy (2)

GREIFSWALD

SS '07 Psychology. *Schuppe*: Psychology (3)
 Pedagogy. *Rehmke*: History of ped. (3); Systems of ped. (3)

WS '07-'08 Nothing offered

SS '08 Psychology. *Rehmke*: Psychology (3); The freedom of the will (2)
 Ethics and Pedagogy. *Schuppe*: Outlines of ethics and ped. (3)

WS '08-'09 Nothing offered.

SS '09 Psychology. *Schuppe*: Psychology (3)
Schunkel (a.p.): History of psych. (2)
 Pedagogy. *Rehmke*: History and systems of ped. (3)

WS '09-'10 Psychology. *Schmekel* (a.p.): Methods and results of exper. psych. (2)

HALLE

SS '07 Psychology. *Ebbinghaus*: Experimental psychology (2)
Uphues (a.p.): General and ped. psych. (2)
Schwarz (d): General psychology (1)

Pedagogy. *Fries*: The Prussian educational system in its historical development (1)
Schwarz (d): General pedagogy with reference to experimental didactics (3)

WS '07-'08 Psychology. *Busse*: Psychology (4)
Schwarz (d): Introduction to exper. psych. (2)

Pedagogy. *Fries*: History of pedagogy since the Middle Ages (2); Pedagogical exercises (1)*

SS '08 Psychology. *Uphues* (a.p.): Psychology (4)
Aall (d): Introduction to exper. psych. (2)

Pedagogy. *Fries*: Selected chapters in general didactics (1)
Aall (d): Experimental pedagogy (2)

WS '08-'09 Psychology. *Ebbinghaus*: Psychology (4)
 Pedagogy. *Fries*: History of ped. since the Middle Ages (1)
Schwarz (d) : Experimental pedagogy (2)

SS '09 Psychology. *Uphues*: Psychology (4)
Ebbinghaus: Experimental psychology (2)

Pedagogy. *Fries*: The Prussian educational system in its historical development (1); Ped. exercises (1)

WS '09-'10 Psychology. *Meumann*: Psychology (4)
 Pedagogy. *Meumann*: Introduction to pedagogy (2)
Fries: History of ped. since the Middle Ages (2);
 Pedagogical exercises (1)

HEIDELBERG

SS '07 Pedagogy. *Uhlig*: The most important disputed questions of the present concerning the organization and administration of instruction in the higher schools (2); Extracts from the ped. writings of Herbart (1); Lectures on parts of pedagogical poems of Lucretius and Ovid (1)
Boeckel (Gymnasial Director): Practical ped. Exercises (2)*

WS '07-'08 Psychology. *Elsenhaus* (d): Psychology (4)
 Ethics. *Windelband*: Ethics (4)

Pedagogy. *Uhlig*: History of educ., instruction, and ped. theories (2); Lectures on the pedagogical classics (1)

SS '08 Pedagogy. *Uhlig*: The most important disputed questions of the present concerning the organization and administration of instruction in the higher schools (1)

WS '08-'09 Pedagogy. *Uhlig*: History of educ., instruction, and ped. theories (2); Herbart's outline of ped. lectures and E. v. Sallwürk's *Normalstufen*

SS '09 Ethics. *Troeltsch*: Ethics (5)

Pedagogy. *Uhlig*: The most important disputed questions of the present concerning the organization and administration of instruction in the higher schools (2)

WS '09-'10 Pedagogy. *Uhlig*: Ped. Classics, Rousseau and Pestalozzi (1)

JENA

SS '07 Ethics. *Rein*: Outlines of ethics (2)

Pedagogy. *Rein*: General didactics (2); Ped. seminar with practical exercises (3)

WS '07-'08 Psychology. *Eucken*: Psychology (3)

Pedagogy. *Rein*: Special didactics (3); Foreign school systems (1); Ped. seminar (3)

SS '08 Psychology. *Linke* (d): Psychology (3)

Ethics. *Eucken*: Ethics (2)

Pedagogy. *Rein*: Special didactics (2); Life and teaching of Herbart; Ped. seminar (3)

WS '08-'09 Psychology. *Liebmann*: Psychology (3)

Ethics. *Rein*: Outlines of ethics (2)

Pedagogy. *Rein*: General pedagogy (1); Ped. seminar (3)

Eucken: History of modern pedagogy (1)

SS '09 Psychology. *Rein*: Elements of empirical psych. (2)

Linke (d): Applied psych. (2); Attention (1)

Pedagogy. *Rein*: General didactics (2); Ped. seminar (3)

WS '09-'10 Psychology. *Eucken*: Psychology (2)

Strohmayer (d): Neurological diagnosis, with practical exercises (1); Discovery and treatment of mental weakness in youth, for physicians and teachers

Ethics. *Linke* (d): Principal problems of ethics and jurisprudence (2)

Pedagogy. *Rein*: Herbart (2); Special didactics (3); Ped. seminar (3)

KIEL

SS '07 Ethics. *Tönnies* (d): Sociology and ethics of family life (1)

WS '07-'08 Psychology. *Martius*: Psychology (4); Psych. seminar (2)

SS '08 Nothing offered

WS '08-'09 Psychology. *Deussen*: Psychology and systems of phil. (4)

SS '09 Psychology. *Martius*: Psych. seminar (2)

WS '09-'10 Psychology. *Martius*: Psychology (4); Psych. seminar (2)

KÖNIGSBERG

SS '07 Psychology. *Ach*: Exper. psych. works, in seminar *

Ethics. *Kowalewsky* (d): Fundamental problems in ethics (1)

WS '07-'08 Psychology. *Ach*: Child psych. and exper. pedagogy (1)

SS '08 Psychology. *Ach*: Psychology (4)

Pedagogy. *Walter*: History and outlines of pedagogy (4)

WS '08-'09 Pedagogy. *Walter*: History and outlines of pedagogy (4)

SS '09 Psychology. *Ach*: Introduction to exper. psych. (1½); Exper. psych. (6)

Hallerworden (d): Chapters in applied psych. (1)

Ethics. *Kowalewsky* (d): Ethics (2)

Pedagogy. *Goedeckemeyer*: History and outlines of pedagogy (4)

WS '09-'10 Psychology. *Ach*: Psych. (4); Exper. psych. (by appointment)

Hallerworden (d): Shakespeare's dramatic art as a subject for applied psych. (2)

LEIPSIC

SS '07 Psychology. *Wundt*: Psychology (4); Psych. Seminar
Wirth (a.p.): Psych. of vision (2)

Ethics. *Barth* (a.p.): Introduction to moral philosophy (1½)
 Pedagogy. *Volkelt*: History of pedagogy I, Middle Ages to
 Rousseau (4); Phil.-ped. seminar
Jungmann: Introduction to pedagogy (2);
 Practical pedagogical seminar

WS '07-'08 Psychology. *Brahn* (d): Psychology (4); Child psych.
 (2); Sense perception (1)
Wundt: Psych. seminar

Ethics. *Heinze*: Ethics and outlines of jurisprudence
 Pedagogy. *Volkelt*: History of pedagogy, II, Rousseau to
 Herbart (3); Phil.-ped seminar
Jungmann: History of higher instruction from
 the Reformation to the present (2); Prac.-
 ped. seminar.
Barth (a.p.): Essentials in education and the
 theory of instruction on the basis of the psy-
 chology of the present (2); Ped. Society

SS '08 Psychology. *Wundt*: Psychology (4): Psych. seminar

Ethics. *Richter* (d): Critical history of ethics
Lipps (d): Philosophical ethics (2)

Pedagogy. *Volkelt*: Pedagogy in the school of Herbart (1);
 Phil.-ped. seminar
Jungmann: Introduction to ped. (2); Practical-
 ped. seminar

WS '08-'09 Psychology. *Wirth* (d): Experimental analysis of
 attention (2)
Krueger (d): Comparative psych. of
 primeval races
Lipps (d): Outlines and essentials of
 psych. (3)
Wundt: Psych. seminar.

Pedagogy. *Volkelt*: General pedagogy (3); Phil.-ped. seminar

Barth (a.p.): History of pedagogy from the Renaissance to the Enlightenment (2); Ped. Society

Jungmann: History of higher education since the Reformation (2); Interpretation of Latin sources of pedagogy (1)

SS '09 Psychology. *Wundt*: Psychology (4); Psych. seminar
Wundt, *Wirth* (a.p.), and *Klemm* (d): Psych. laboratory (29)

Wirth (a.p.): Theory of psych. method (2)
Krueger (d): Psych. and ethics of economical living (2)

Brahn (d): Child psych. and exper. pedagogy (2)

Pedagogy. *Volkelt*: History of pedagogy (4); Phil.-ped. seminar, Goethe's views of life

Jungmann: Didactics of the higher schools (2); Practical-ped. seminar

Rietschel: History of pedagogy.

WS '09-'10 Psychology. *Wundt* and *Wirth* (a.p.): Psych. laboratory (7)

Wirth (a.p.): Psychology (4)

Salow (?): Introductory course in exper. psych. (2)

Brahn (d): Outlines of psychology (1½)

Klemm (d): History of modern psych. (2)

Ethics. *Barth*: History and systems of ethics (2)

Pedagogy. *Volkelt*: History of ped. from Rousseau to Herbart (3); Phil.-ped. seminar, Jean Paul's *Levana* and extracts from the writings of W. v. Humboldt

Barth (a.p.): Essentials of the theory of education and instruction on the basis of modern psych. (2)

Jungmann (a.p.): Introduction to pedagogy (2); Practical-ped. seminar

Hofmann (Theology): Pedagogy and its history (4); Pedagogical seminar (1)

Lange (Medicine): School hygiene and school disease (2)

MARBURG

SS '07 Psychology. *Menzner* (a.p.): Psychology (4)

WS '07-'08 Ethics. *Menzner* (a.p.): Ethics (2)

Pedagogy. *Natorp*: History of pedagogy since the Renaissance (3); Phil. ped. seminar *

SS '08 Ethics. *Cohen*: Ethics and jurisprudence (4)

WS '08-'09 Psychology. *Cohen*: Psych. as an encyclopedia of philosophy (4)

Pedagogy. *Natorp*: General pedagogy (3)

SS '09 Psychology. *Schwarz*: Psych. of mental labor and endowment, with experiments (1)

WS '09-'10 Psychology. *Natorp*: General psych. (3); Psych. exercises (2)

Schwarz: Introduction to exper. psych. (2)

Pedagogy. *Natorp*: History of pedagogy since the beginning of modern times (3); Herbart's philosophy and ped. (2)

MUNICH

SS '07 Psychology. *Pfänder* (d): Outlines of psychology (4)

Schneider (d): Empirical psychology (4)

Ethics. *Scheler* (d): Fundamental questions in ethics (3)

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Pedagogy. *Rehm*: History of pedagogical theories from the Enlightenment to the present (4)

WS '07-'08 Psychology. *Lipps*: Psychology (4)

Pedagogy. *Pfänder* (d): Outlines of the theory of education and instruction on psychological principles (4)

SS '08 Psychology. *Schneider* (a.p.): Empirical psych. (4)

z. *Asler* (d): Outlines of psych. (4)

Lipps: Psych. seminar *

Ethics. *Lipps*: Ethics and phil. principles of the theory of law and society (4)

Pedagogy. *Rehm*: Theory of pedagogy and didactics for higher schools (4)

Fischer (d): Ped. exercises *

WS '08-'09 Psychology. *Lipps*: Psychology I (5)

Pedagogy. *Pfänder* (d): Outlines of the theory of education and instruction on psych. principles (4)

SS '09 Psychology. *Schneider* (a.p.): Psych. with special reference to ped. questions involved (4)

z. *Asler* (d): Psych. (4); Psych. exercises (1)

Fischer (d): Psych. exercises (1½)

Burger (d): Art and race psych. (2)

Ranke: Anthropological psych. (4)

Ethics. *Geiger* (d): Introduction to ethical problems (2)

Fischer (d): Introduction to problems of sociology (3)

Pedagogy. *Rehm*: History of ped. theories (4)

Jordan: Fundamental questions in the method of modern language instruction (1)

WS '09-'10 Psychology. *Lipps*: General psych. (5); Psych. seminar (1½)

Fischer (d): Psych. exercises (1½)

Meyer (d): Psych. of Aristotle (1)

Ethics. *Scheler* (d): Fundamental problems of ethics (4)

MÜNSTER

SS '07 Psychology. *Meumann*: Empirical psychology (4)

WS '07-'08 Psychology. *Geyser* (a.p.): Psychology (4)

Pedagogy. *Meumann*: General ped. on psych. and exper. principles (2)

SS '08 Psychology. *Meumann*: Introduction to exper. psych. and ped. (2)

WS '08-'09 Psychology. *Meumann*: Introduction to exper. psych. and ped. (2)

Geyser (a.p.): Psychology (4)

Ethics. *Koppelman* (d): The most important problems of ethics and jurisprudence

SS '09 Psychology. *Meumann*: Psych. exercises

Pedagogy. *Koppelman* (d): Gymnasial pedagogy and the teacher's office (2)

WS '09-'10 Psychology. *Geyser* (a.p.): Psychology (4); Discussion of psych. questions (1)

Pedagogy. *Cauer*: Outlines and selected chapters in didactics (2)

ROSTOCK

SS '07 Ethics. *Erhardt*: Ethics (2)

WS '07-'08 Nothing offered

SS '08 Psychology. *Erhardt*: Psychology (4)

WS '08-'09 Pedagogy. *Erhardt*: Pedagogy (2)

SS '09 Ethics. *Erhardt*: Ethics (2); Exercises in the ethics of Ed. v. Hartmann (2)

WS '09-'10 Nothing offered

STRASSBURG

SS '07 Nothing offered

WS '07-'08 Psychology. *Baeumker*: Psychology (4)

Ethics. *Frhr. v.d. Pfordten* (d): Ethics (2)

SS '08 Pedagogy. *Ziegler*: Pedagogy (2)
 WS '08-'09 Psychology. *Ziegler*: Empirical psych. (4)
 Ethics. *Ziegler*: Ethics (2)
 SS '09 Psychology. *Baeumker*: Psych. exercises (2)
 Pedagogy. *Ziegler*: History of ped. (2)
 WS '09-'10 Psychology. *Baeumker*: Psychology (4); Introd. to
 exper. psych. (1)
 Ethics. *v.d. Pfordten* (d): Ethics (2)
Wundt (d): History of Greek ethics (2)

TÜBINGEN

SS '07 Nothing offered
 WS '07-'08 Psychology. *Maier*: Psychology (4)
 Ethics. *Maier*: Ethics (4)
 SS '08 Psychology. *Spitta*: General psych. (4)
 Ethics. *Adickes*: The deterministic viewpoint and its con-
 sequences for religion, ethics, and pedagogy (1)
 WS '08-'09 Psychology. *Adickes*: Psychology (4)
 Ethics: *Spitta*: Philosophical ethics (4)
 SS '09 Psychology. *Spitta*: General psych. (4)
 Pedagogy. *Schiele* (d): Church and school in the nineteenth
 century
 WS '09-'10 Psychology. *Maier*: Psychology (4)
 Ethics. *Adickes*: Philosophical ethics and jurisprudence (4);
 Exercises in ethical questions (1)

WÜRZBURG

SS '07 Ethics. *Scherer* (d): Ethics (4)
 Pedagogy. *Boll*: Theory and history of educ. and instruction
 from the eighteenth century to the present (4)
 WS '07-'08 Psychology. *Scherer* (d): Psychology (4)
Buehler (d): Psych. of speaking and
 reading (2)

SS '08 Ethics. *Scherer* (d) : Ethics (4)
Pedagogy. *Buehler* (d) : Exper. ped. (4)

WS '08-'09 Psychology. *Külpe* : Psychology (4)
Scherer (d) : Psychology (4)
Pedagogy. *Stölzle* : Logic and the theory of method (4)

SS '09 Psychology. *Külpe* : Psych. of thought and feeling (2) ;
Psych. exercises (2)
Külpe and *Buehler* (d) : Exper. psych. (5)
Buehler (d) : Child psychology (2) ; Introd.
to exper. psych. (2)

Ethics. *Neudecker* (d) : The trend of modern ethics (2)
Pedagogy. *Stählin* : History of ped. (4)

WS '09-'10 Psychology. *Buehler* (d) : Exper. psych. (2)
Pedagogy. *Buehler* (d) : Exper. ped. (4)

The University Pedagogical Seminar.—Notwithstanding the strong support given it by a few of the best-known leaders in educational thought, the university pedagogical seminar, with practice school attached, has not found a permanent place in many institutions. The work of Herbart, Brzoska, Stoy, and Ziller has already been described. These men believed in a university seminar offering opportunity for both theoretical and practical training and serving the double purpose of training teachers and developing pedagogical science, through carefully directed experimentation. By all of them the practice school was regarded as a necessity, and in their work (with the exception of Brzoska, who was not able to secure one) it was the center of interest and effort. Leipsic and Jena are the only universities now maintaining practical peda-

gogical seminars with an opportunity for practice teaching by students in connection with their theoretical pedagogical study. At Leipsic the seminar stands in connection with the city *Gymnasium* and *Realgymnasium*, which are only indirectly under the control of the university. At Jena only is there a practice school maintained entirely by the university. As the most prominent modern advocate of the university pedagogical seminar with practice school attached, Professor William Rein may be permitted to speak.

"The Significance of the Pedagogical Seminar of the University and Its Problem. — The pedagogical seminar of the university has a double task. On the one hand, it promotes the development of pedagogical science; on the other, the theoretical and practical training of educators who are ambitious for scientific knowledge. At first it seems impossible to reconcile these two demands. They are, however, inseparably linked together.

" 1. First of all it cannot be doubted that the universities, the highest centers of intellectual education belonging to a nation, should not ignore such an important matter as the education of the different classes of the people. If they do it, they estrange themselves from the life of the people and renounce their influence on large and important fields of public life. Both suffer under this neglect. The universities lose themselves in scientific research, and educational affairs are left to the pedagogy of the state or to laymen. However excellent the work of these may be, it is beyond question that the far-reaching problems of education, so significant for the development of a people, can best be examined and furthered where practical philosophy flourishes, and constantly considers the aim of all human life; where empirical

psychology seeks to discover the motions and laws of individuality and the soul of the people, and where, finally, hygiene and physiology explain the conditions of bodily welfare. In close connection with such fundamental investigations, the study of pedagogy will undoubtedly prosper best, and progress in the science of pedagogy can be made most rapidly in the university.

" Surely there the conditions are most favorable for introducing the future generations of educators into the scientific laboratory, and for laying a good foundation for a successful career. The necessary requirement for this is threefold: (1) A clear understanding of the educational problems of society; (2) a warm heart for youth, upon whom the future of the people rests; (3) strong and energetic participation in the education of the people. It is not difficult to prove that these three requirements can best be fulfilled in a pedagogical seminar of the university which is connected with a practice school. A knowledge of the problems of education can best be obtained where scientific pedagogy is naturally cultivated, because it must continually stand in close relation to practical philosophy, empirical psychology, and physiology. With this clearness of vision and sharpness of insight into educational problems must be connected a warm feeling for youth, their needs and their desires, as well as a strong will and ability to realize the ideals of education. The foundation for these qualities can be laid, and existing talent can be trained, through practice in teaching, which is offered in the practice school of the seminar. In such a place therefore educators can be trained, who upon entering into our public school life carry along with them so much force and practical ability that they contribute effectively to the advancement of our people's education everywhere.

" 2. In the pedagogical seminar of the university that has a practice school, the relation between theory and practice can be shown. This is necessary for all progress. Theory separated from practice is not sufficient, for it is a long and difficult way from knowl-

edge to practice. The application of the theory must be well learned. In the pedagogical seminar the theoretical lectures and theses of the students can continually be supplemented, illustrated, corrected, and vitalized through practical teaching in the practice school. An earnest interchange of theory and practice may, therefore, be introduced and continued, as it is necessary for the further development of pedagogical science and advantageous for the training of future educators. For educators are to be trained here, not merely teachers. Whoever has only the latter in mind does not need such means. He can renounce a more thorough philosophical training and concentrate the preparation for the teaching profession upon the communication of good rules for the teaching of those subjects in which the candidate has passed his examination. Naturally the pedagogical seminar of the university is far from such a conception.

“ 3. Students of different subjects work together in the pedagogical seminar of the university. This can but exercise a most beneficial influence in so far as the one-sidedness, which so easily comes through the study of subjects, is in part at least counterbalanced. The young men, according to Lessing, are led to look from one science into another, to understand the educational problem as part of a larger problem, and to value a single subject as an element of a larger organism. They are thus led through a more thorough knowledge of details up to a higher understanding, which is absolutely necessary for any truly productive work.

“ 4. In the pedagogical seminar of the university not only teachers for gymnasia, but also teachers for all higher schools are trained, as well as teachers for normal schools and for *Realschulen*. For where else should the normal school teachers especially receive their pedagogic training? At the same time the connection, the unity of the entire educational system is continually emphasized as well as the correlation of the single parts. This certainly is better suited to a continual development than an artificial isolation of schools and teachers, even if the latter

plan would better please the vanity of the different classes of teachers.

" 5. The chief problems of the seminar of the university are, therefore, to awaken enthusiasm concerning the education of the people in general, and to effect an understanding of the whole educational system. On this basis every individual should continually work and should get acquainted particularly with the special organism into which his profession will introduce him later. In a word, it is the chief task of the seminar of the university to lay the foundation which leads to the formation of pedagogical character. The true conception and the higher understanding of educational problems cannot come from the theoretical instruction of the university alone, or from the study of a special science, but both come through practical work. In his intercourse with children the future teacher must control himself, and habituate himself to order and to regular work; he must understand clearly what is to be taught and must refrain from doing many things which otherwise self-interest might easily lead him to do. Furthermore, if we think of all the young men striving for a common end, and of the influence that they exercise, of the problems which are the same for them all, of the ideal disposition which shows itself in frank criticism and in mutual coöperation, the seminar of the university can well be called an excellent school for the formation of character. Teachers thus trained carry their ideals out among the people and work with earnest zeal for the inspiration of society.

" It is doubtless true, also, that the universities furnish the best opportunity to get acquainted with the biological bases of pedagogy and to study their points of contact with medicine so far as this is necessary for the teacher. Pedagogical biology, hygiene, and pathology can here be drawn into the range of pedagogical study, particularly if an educational institution can furnish the illustrative material, as is the case at Jena, where, on the Sophienhöhe, an institution for mentally defective children has been erected.

" 6. Finally the pedagogical seminar of the university is the best place for the further development of the science of pedagogy. While the schools of the state are dependent upon instructions from the state, so that there is no opportunity for experiments, the pedagogical seminar of the university with its practice school enjoys academic liberty. It has, therefore, a great advantage over the gymnasium and over the seminar for normal school teachers. For it can make different experiments, naturally not without well-defined plans and a certain object in view, but such experiments as have been well considered theoretically, such as changes in the curriculum, introduction of new means of illustration, examination of new textbooks, psychological and physiological investigations, new methods of procedure in the general and special field of teaching, and so on. Whatever has stood the test of practical experience in those practice schools of scientific pedagogy can then safely be introduced into our public schools. In this way a healthy progress takes place in our science and consequently also in our school system. This same thought has been expressed by Kant. 'Experimental schools must be established before we can establish standard schools.' (Erst muss man *Experimentalschulen* errichten, ehe man *Normalschulen* errichten kann.) Unfortunately the authorities have not listened sufficiently to this demand."¹

The Gymnasial Seminar is all but universal in Germany to-day as the institution in which teachers in the higher schools receive their special pedagogical training. In Prussia, where it prevails throughout, there are forty-nine seminars (1909) with a capacity of approximately three hundred candidates, the number for each seminar being legally limited to six. A seminar may be moved or discontinued at any time at the option of the provincial

¹ *Encyklopädisches Handbuch der Pädagogik*, Heft VI, 532.

school board. The qualifications of the director, the opportunities for teaching afforded by his school, and the general geographical position are the main factors in the location of a seminar. The number of seminars and the number of candidates admitted to them depend upon the demand for teachers. It is the purpose of the government to maintain only enough seminars to supply the annual demand for teachers, which is not great. In Saxe-Weimar there is only one higher school seminar, that connected with the *Gymnasium* at Jena. It is conducted in practically the same manner as the Prussian seminars except that its members are also required to work in the university pedagogical seminar and its practice school. In Saxony, also, there is but one higher school seminar, that which has been described as the practical pedagogical seminar of the University of Leipsic. The dominating influence of Prussia in the German Empire exists in school affairs as in other things, and there seems to be a general movement among the German states to adopt the Prussian *gymnasial seminar*.

Perhaps the most prominent modern supporters of the *gymnasial seminar* are Dr. Hermann Schiller, who, at the time of his death in 1902, was director of the *Gymnasium* in Giessen, director of the seminar connected with it, professor of pedagogy in the university, and a member of the Examination Commission for Prussia; Dr. Otto Frick, who was director of the *Franckesche Stiftungen* and director

of the seminar, the *seminarium præceptorum*, from 1881 till his death in 1892; and Dr. Wilhelm Fries, who has held the same position since 1892. Scarcely less earnest, however, has been the support of many others, — directors of seminars, directors of higher schools, government school officials, and professors in the university who believe that the practical training of teachers belongs in the gymnasial seminar rather than in the university.

The points upon which there is general agreement among these men are as follows: 1. The university can offer valuable training in theoretical pedagogy, especially in philosophy, ethics, logic, psychology, and the history of pedagogy. 2. The work in the theory of pedagogy that is practicable in the university is not sufficient, but should be supplemented by similar work in the gymnasial seminar in close connection with the actual work of the school. 3. The spirit of the university is scientific rather than practical, and it is too far removed from the actual needs of the school to make successful practical training possible. 4. Both the time and the interest of the university student are so occupied with the theoretical and scientific work of the university course that he cannot work very successfully in the practical sphere of the school. 5. The difficulties which must always be encountered in establishing a practice school under the direction of the university are never fully overcome. 6. The candidate needs the completed university course as a basis for his practical

training. 7. The candidate needs all of his time, strength, and interest free to devote to the consideration of the current problems of the school. 8. The higher school, under the management of a well-trained and efficient rector who is also director of the seminar, offers a larger and much more natural field for practice than can possibly be provided in any university seminar. 9. The gymnasial seminar affords the candidate an opportunity to combine the study of pedagogical theory with actual practice under normal conditions and under the careful supervision of competent teachers and organizers.

It seems worth while to quote the following extracts from the writings of Schiller, Frick, and Fries, as representative of the spirit and views of the supporters of the gymnasial seminar.

"I hope the reader will have been convinced by this discussion that a seminar connected with a *Gymnasium* is in a position to instruct its members in the theory of pedagogy at least as well as a university seminar. Moreover, if the university has no practice school of its own that is a *real school*, it cannot compete at all in advantages with a good higher school. For everywhere in the school theory and practice go hand in hand, and the young teacher is continually in a position to see the practical form of instruction and education and to learn the theoretical foundation of method, or to observe theory in its practical application. He has, moreover, the advantage, not to be lightly esteemed, of becoming acquainted with the *real* conditions in which he will sometime be placed, not ideal and artificial conditions which are scarcely ever realized in practical service."¹

¹ Schiller, H. S., *Pädagogische Seminarien*, 123.

high task of the scientific advancement and deepening of their members. Practical exercises in the future calling of the teacher lie outside of their sphere and would, even if they were attempted, place the peculiar purpose of such institutions in doubt. But just as truly let the opinion be once for all abandoned, that scientific ability alone qualifies one to undertake the work of instruction and that consequently the quality of instruction improves as scientific ability rises. Certainly the teacher can and should exert an influence through the example of the ideal life; and, moreover, this will be possible, especially in the case of older pupils, through devoted fulfillment of duty and through scientific attainments; but the pedagogical art is, nevertheless, much too difficult and important to be acquired by mere use or to be followed only incidentally. On the contrary, there is needed a thoroughly thoughtful introduction to its laws, and, for this purpose, special institutions serving this particular end.”¹

As representative of those who, while they recognize the value of the gymnasial seminar, are nevertheless disposed to criticize it, Fries cites the objections of Director Vogel as follows:—

“In his essay *Upon the Seminar Question*, he censures chiefly a certain academic vanity of the candidates. He does not, indeed, deny the advantages of the existing seminar arrangements, but he raises serious doubts concerning: (1) The quarter year of visiting, which keeps the beginners too long in a state of mere receptivity; (2) the requiring of a written lesson-plan for every class period; (3) the insufficient practical employment; (4) the disturbance of regular instruction, which is produced by the practice lessons; (5) the regulation that, at every lesson, the director or an authorized teacher must be present; for, on the one side, this is a burden

¹ Fries, Wilhelm, *Die Vorbildung der Lehrer für das Lehramt*, 113.

to the teachers, and, on the other, it produces a lack of independence in the candidates. The *Probejahr*, also, seems to him to be insufficiently fruitful, because it offers to the beginners scarcely any opportunity to strengthen and deepen their experience through further organized instruction. He proposes, therefore, to unite the seminar with a practice school placed at its service, such as exist in the case of the seminars for the teachers in the lower schools. The practice school should contain only the lower and middle classes. The seminar should consist of one director, four teachers, and twenty or more candidates. The time of training he places at three semesters. Such a practice school, which should conduct classes from *Untertertia* as well as real gymnasial divisions, would, according to Vogel's view, make attempts at practice teaching possible earlier than a regular school. Finally, to each candidate he would assign a tutorship over a number of pupils from the different classes."¹

Sallwürk's plan for the training of teachers is also worthy of mention. He would establish a special state seminar (*Staatsseminar*) under the leadership of state authority, and separate from both the university and any particular higher school. Schools of various kinds, however, should be available for purposes of observation and practice. Candidates for both lower and higher schools should be admitted, and each should be required to do some teaching in both kinds of schools. The first lesson plans should be used, not in school classes, but in groups of candidates, and should be criticized by them. The theoretical study should include short courses in the theory of science (*Wissenschaftslehre*), the history of cul-

¹ *Ibid.*, 106.

ture (*Kulturgeschichte*), psychology, physiology, ethics, pedagogy, hygiene, school architecture, and drawing,—a rather broad field for one year's work.

The gymnasial seminar, in its modern form, is still young in Germany. The schoolmen feel this, and they are earnest in their endeavors to increase its efficiency as experience points the way. Seminar directors publish reports from time to time, covering their experience for a series of years. As an institution it is still in process of development, but the testimony of school directors whose teachers have been trained in it, and indeed the opinion of educators generally, is very strong in its favor.

Length of Period of Practical Training.—The duration of the period of practical training is a question about which there is considerable difference of opinion. Not all of the German states have gymnasial seminars of their own, but their teachers are trained in those of other states. Of the states which have seminars, Prussia, Braunschweig, Saxe-Weimar, Hesse, and Mecklenburg have both the *Seminarjahr* and the *Probejahr*; Baden, Saxony, Bavaria, and Württemberg have but one year of practical training. From 1826 to 1890 the *Probejahr* had been a requirement in Prussia. In general this was simply a time of trial teaching, the candidate often receiving no particular instruction or assistance from his superiors. As was to be expected, this proved unsatisfactory as a training period, and in 1890 the *Seminarjahr*

was instituted, and more definite rules for the work of the *Probeyahr* were prescribed. There are many who believe that both of these years are important, the first as a time for the study of theory and practice, with emphasis upon the former; the second as a time for the study of theory and practice, with emphasis upon the latter. The present law in Prussia prescribes two years, and German officials are not disposed to criticize existing regulations of any sort; but there are many who think that, if a proper division of time were made between theoretical study and actual practice during one year, quite as good results would be obtained as are now secured under the two-year arrangement.

CHAPTER V

STANDING OF THE TEACHER IN THE HIGHER SCHOOLS

WHEN the candidate has received his certificate as *Oberlehrer*, or teacher in the higher schools, he is ready for a permanent appointment. A few years ago, when there was a superabundance of teachers, he had to wait from two to ten years for such an appointment. Five years might be regarded as a low average. In the meantime he might teach in a private school or do such odd jobs as he could get, which, in Germany, are not abundant; but he was not permitted to do work that was beneath the dignity of his profession, and he was required to hold himself in readiness for an appointment at any time. At present, owing to a scarcity of teachers throughout Germany, an appointment, as already stated, is likely to come at once. When a vacancy occurs, qualified teachers are chosen as their names appear on the waiting list, except that the authorities may choose any one from the first three. Once he is appointed, the teacher in the higher schools, like every other German official, occupies a very clearly defined position with reference to the state and only a little less definite posi-

tion in his relations to society. Professionally and financially the state has fixed his status, and his social rank is determined more by his birth and professional position than by any thing else.

Professionally his standing is as clearly recognized as is that of the clergyman, lawyer, physician, or state official of any sort. In Germany there is not only a profession of teaching, but there is a profession of teaching in the higher schools. Neither a teacher in the lower schools nor a university professor can enter that profession except through the straight and narrow way of specific preparation for it. As shown in preceding chapters, the state has sharply defined what that preparation shall be. It has also provided that, when a man has met the conditions prescribed, he shall receive recognition as a learned man and a state official of definite rank. He cannot be deprived of his position except for cause. Within certain limits, which are no more narrow for him than for other German officials, he is left free to follow his own devices as a professional expert. If he is reasonably successful, no one is likely to interfere with him. If he shows superior ability, either as an administrator or as a teacher, he is always in line of promotion. He is a learned man along with the university professor, and he may be called to the latter's chair or to the directorship of a school or to a higher administrative position in the state. He begins his professional career with twenty-four hours of teaching

per week; after twelve years it is reduced to twenty-two hours, and after twenty years it may be further reduced to twenty hours, where it remains for the remainder of his working life. The upper half of the teachers in the Prussian higher schools, that is, the half longest in service, the minimum period being twelve years, are given the title of professor, and they are promoted from class five to class four of state officials. Since the teacher's financial compensation is definitely determined by a special law, it is not affected by this promotion. Whether regarded from within the profession or from without, he may always have the stimulating consciousness of a definite professional recognition.

Financially the teacher's position is fixed by the state. According to the law of June 5, 1909, the salaries of teachers in the higher schools of Prussia which are supported by the state or over which the state exercises authority, are as follows:—

“§ 1

“The annual salary is:—

“1. For the principals of complete institutions (*Gymnasia, Realgymnasia, Oberrealschulen*):—

“a. In Berlin, 6000 to 7200 marks.¹

“b. In other places, 5400 to 7200 M., besides 600 M. additional for living expenses.

“2. For the principals of institutions having less than a nine-year course (*Progymnasien, Realprogymnasien, Realschulen*), 4800 to 7200 M., besides 400 M. additional for living expenses.

¹The mark equals about twenty-four cents of United States Money.

- “3. For officially appointed scientific teachers, 2700 to 7200 M.
- “4. For officially appointed teachers who have passed the prescribed examination as drawing teachers for the higher schools, or who have proved their qualifications as music teachers for the higher schools, or who are qualified for appointment as teachers in the *Mittelschulen*, 2100 to 4500 M.
- “5. For other officially appointed technical and elementary teachers, as well as teachers in the *Vorschule*, 1800 to 4200 M. The scientific assistants receive a yearly remuneration of from 2100 to 3000 M.

“§ 2

“The increase in salary is given in the form of additions for term of service.

- “1. For principals of complete institutions:—
 - “a. In Berlin (§ 1, No. 1, a), 600 M. additional after 3 and 6 years of service.
 - “b. In other places (§ 1, No. 1, b), 600 M. additional after 3, 6, and 9 years of service.
- “2. For the principals of incomplete institutions (§ 1, No. 2), an addition of 600 M. after 3, 6, 9, and 12 years of service.
- “3. For scientific teachers (§ 1, No. 3), 700 M. additional after 3, 6, and 9 years of service and 600 M. additional after 12, 15, 18, and 21 years of service.
- “4. For the teachers indicated in § 1, No. 4, an addition of 300 M. after 3, 6, 9, 12, 15, 18, 21, and 24 years of service.
- “5. For other technical and elementary teachers, as well as for teachers in the *Vorschule* (§ 1, No. 5), an addition of 300 M. after 3, 6, 9, 12, 15, and 18 years of service, and an addition of 200 M. after 21, 24, and 27 years of service.

“The remuneration of scientific assistants, indicated in § 1, begins with 2100 M. and increases after one year to 2400 M., after two years to 2700 M., and after four years to 3000 M.”¹

¹ Beier, Adolph, *Die höheren Schulen in Preussen*, 848, 1909 edition.

The salaries in other states are, as a rule, not quite as high as those in Prussia. Regularly qualified teachers in city schools not supported by the state must be paid at least as much as the state schedule indicates. As a matter of fact, in the larger cities they are usually paid a little more, otherwise they would prefer to work in schools supported by the state. The compensation received by teachers in purely private schools is usually much less than that paid in the schools supported by the state or the cities.

The pension law of Prussia provides that, except in special cases, if a teacher is incapacitated for service or dies before he has served ten years, no pension is paid to him or his family. If he is incapacitated after ten years of service, he receives a pension amounting to $33\frac{1}{3}$ per cent of the sum of his last year's salary and his expense allowance, with an increase of one sixtieth each year thereafter. After forty years of service, or at the age of sixty-five, he may retire with a pension amounting to 75 per cent of his last year's salary, but the amount may not exceed 6000 marks. In case of his death, his widow receives four tenths of the pension which her husband would have received had he been pensioned on the day that he died, but the amount may not exceed 2400 marks. Each of their children who is under eighteen years of age, receives one fifth of the amount of the widow's pension. In case of the death of both parents,

each child receives one third of the amount of the widow's pension. But in no case can the total amount paid to the widow and children exceed the amount of the pension due the father at the time of his death. The pension laws of other states are similar to those of Prussia, although there are various minor differences.

The salary of the higher school teacher is not large, but if he uses strict economy, it enables him to pursue the scholarly life, to maintain his family in comfort, and to meet the requirements of good living in the social class to which he belongs; while the certainty of a pension in case of misfortune or death after a few years of service, relieves him from anxiety for the future.

Social Position in Germany depends not upon wealth, but upon birth and official position. If, by dint of his own industry and ability and the self-denial of his parents, a man attains official position the social prestige of which is higher than that accorded to him by birth, his social position is determined by the official position, although he may be less warmly welcomed by his associates on account of his lower birth. If, on the contrary, his social position by birth is higher than that accorded to the official class of which he is a member, he usually has the benefit of both, a possible exception being made of those cases in which the social class in which he is born feels itself humiliated by the official service in which he is engaged. The social position of the higher school

teacher is, in general, simply that of the official class to which he belongs. Socially, as well as financially, it ranks with that of the judges. This equality was expressed tersely by a prominent school director who said that a young woman would marry a teacher as willingly as a judge,— a very significant test in Germany. Judges, clergymen, higher post-office officials, and teachers in the higher schools are social comrades, the members of each group having had approximately the same amount of training for their work. They all belong to the lowest class of officials into which the *Provinzial Kollegium* is divided, but recognition even in this lowest class is a very important matter, since it secures good social standing.

CHAPTER VI

IMPRESSIONS OF THE GERMAN SYSTEM

THE German system of training teachers for the higher schools is an integral part of a complex and elaborate educational system, and judgment concerning its merits should be based upon a knowledge of the whole organization. No nation has a more clearly defined idea of the ends of education, and in no nation will be found more carefully considered means for the attainment of those ends. In this discussion there is no attempt to examine or criticize German ideals, but only to record impressions concerning the efficiency of the German methods of training teachers for the schools in which those ideals are being worked out, and incidentally to suggest the adaptability of some parts of their system to our own purposes. The points to be considered are the general academic training in the higher school and the university, the pedagogical training in the university, the state examination (*Staats-examen*), the *Seminarjahr*, and the *Probejahr*.

The General Academic Training of the higher school teacher is excellent. In the higher school he has been thoroughly drilled in the elements of many sub-

jects, as a glance at the programs of studies for these schools shows. Before he leaves the school, in most cases, he has chosen the subjects in which he wishes to give instruction when he becomes a teacher. In the required three years at the university he has had an opportunity for scholarly training both in these subjects and in such others as he may elect. He may even proceed to the degree of doctor of philosophy before taking the state examination for admission to the *Seminarjahr*. Although this is not required, an increasingly large number of students do it. The result is that he is a well-trained, scholarly, and reasonably mature man before he can become a candidate for the position of teacher in the higher schools. He has had time and opportunity to become imbued with the spirit of the scholarly life.

Such a man is prepared to lecture at length to his pupils upon the subjects of his choice; indeed it would be much easier for him to do this than to do the teaching that is required of him when he begins his course of practical training. He has been studying the abstractions of pure mathematics, let us say, or the niceties of comparative philology; he must now teach arithmetic and the elements of language to nine-year-old boys. In making this transition, however, he does not lose the power and the instincts of the scholar. These remain with him to give strength and inspiration for every day's work. The writer has seen German teachers teaching subject

matter which seemed very heavy for the grade of pupils concerned, but it was always well taught. He has never seen a teacher "shooting over the heads" of pupils simply because he was a scholarly man. On the other hand, it was a great satisfaction to see classroom work in which the teacher gave no anxious thought to the subject matter, but had his whole attention fixed upon teaching to pupils that which was to him perfectly familiar. The American fear that a man may know too much to be a good secondary school teacher does not prevail in Germany. If the danger exists, a way of overcoming it seems to have been found. My impression is that the superior scholarship of the German teacher is the most important single factor in the excellence of German schools.

Take, for example, the field of modern-language teaching. The ideal of the schools is to give the pupils not only a reading knowledge but also an elementary speaking knowledge of the language studied five or six years in school. Under no circumstances can such a knowledge be attained except from a teacher who knows both the written and the spoken language. The philological training of German students is always thorough, but they are now required to add to this a speaking knowledge of the language, gained by at least six months' residence in a country in which that language is spoken, or they must show equal proficiency gained in some other way. The impetus to foreign language teaching given by such

instructors is tremendous. They not only learn the language, but they become acquainted to some extent with the spirit of the people whose tongue it is, — a very important element in successful language teaching. Under their instruction the language is "moved," as the Germans say, and the pupils are accustomed from the beginning to assist in the operation. The language studied becomes the language of the classroom, and the pupils learn the common idioms of speech and correct pronunciation, as well as the significance of words as they appear on the printed page. The attainments of German teachers of the modern languages are at once surprising and discouraging to the ordinary American modern-language teacher, and the fundamental basis of success is found in the teacher's thorough knowledge of the subject matter.

The Theoretical Pedagogical Training received by the student in the German university is a rather uncertain quantity. Since a university student is entirely free in his choice of subjects, his interest may or may not lead him into pedagogical courses, even if he is in an institution in which such courses are given. Reference to the list of courses in education offered in German universities from Easter, 1907, to Easter, 1910, shows that the opportunities for pedagogical training are very limited in some of them. In several cases they are confined to philosophy, ethics, and general psychology, which are nearly always given. In a few institutions educational psychology holds

a high place. The most common course in pedagogy proper is that in the history of pedagogy and pedagogical systems. Courses in general method and in methods of teaching particular subjects are occasionally given, and also courses in gymnasial pedagogy. Courses in management and in the sociological phases of education are almost entirely wanting, probably because management is so largely an affair of school administrators, and because the study of sociological problems, outside of official circles, has not yet taken a deep hold on German thought. In only a few institutions is there opportunity for observation and practice teaching under the supervision of the university department of education. The fact that the student must be examined upon philosophy and pedagogy will probably induce him to take at least one or two courses in these subjects as well as in psychology, but the number of courses may be very small and the work elementary. An examination of the reports of the candidates in the *seminarium præceptorum* shows that this was actually the case in several instances. In general the study of the theory of education in the university course by prospective teachers is not very extensive, and in some cases more would certainly be desirable. On the whole this work seems not superior to that offered in many American universities, and it is probable that the American student now devotes as much time to it as the German.

The State Examination has for its purpose testing the attainments of the student on the scientific or purely academic side to determine whether his scholarship is sufficient and of such a character as to make him a suitable candidate for the position of teacher in the higher schools. A considerable knowledge of religion, the German language and literature, philosophy, and pedagogy is thought to be a necessary part of the equipment of every teacher, and this is tested in every case by an oral examination and by a thesis which is supposed to indicate the applicant's power to think and to express his thoughts systematically. In the preparation of the thesis he is permitted to use books freely, but he is required to sign a statement that he has received no assistance from persons. The examination in the subjects which he wishes to teach is much more severe. He must defend his thesis, he must write a short paper on some topic assigned at the beginning of the three-hour period permitted for it, and he must pass an oral examination before the committee of examiners. In all of its different forms the examination is a serious and dignified procedure and a real test of the applicant's ability in various directions. It gives assurance that the required three years at the university have not been spent in vain. It tests general culture, scholarly knowledge of the principal subjects, ability to use the German language in the systematic expression of ideas, and, in a general way, the

trend of the candidate's thought. On the whole, it seems to emphasize the important things and to contribute safety and dignity to the profession.

The *Seminarjahr* is the keystone in the arch which binds together and holds in place high academic scholarship on the one side and thorough pedagogical training on the other. It is the most modern and the most distinctive feature of the German system of training teachers. Before its establishment in 1892, the teaching in German higher schools was what might have been expected from scholarly men with a minimum of theoretical pedagogical training. Since its introduction the practical pedagogy of the higher schools has greatly improved. The Germans themselves feel that the institution is still in its infancy and that it may be made more effective with experience, but in general they have great faith in it. It was introduced because a need was felt for better professional training than was afforded by the academic and theoretical pedagogical work of the university and by the trial teaching of the *Probejahr*. The purpose of the new institution is to combine theoretical and practical pedagogical training under the direction of a practical schoolman of long and successful experience, who is competent to show the relation between theory and practice.

The members of the seminar constitute in themselves the most striking factor in the work of the *Seminarjahr*. They are young men, usually between twenty-five and

thirty years old; they are scholarly, capable, ambitious, and eager for admission to their profession. The career upon which they are about to enter is an honorable one, and it will afford a competence for themselves and their families. They have but to prove themselves competent during this year and the next, and the doors of the profession swing open to them for life. They must succeed, however, during these trial years, otherwise they miss the goal entirely. They have every incentive to become good teachers at the earliest possible moment, and they are in a position to profit greatly by the training which the work of the year affords.

The ability of the members of the seminar as learners is matched by that of the directors as instructors. They are always men of long and successful experience, and they are chosen with a view to their adaptability to this work. They are university trained men who have proved themselves as teachers and administrators, and some of whom have won distinction through their writings. In several cases they are professors of pedagogy in the universities of the cities in which they live. They are practically always directors of higher schools, the proper administration of which is their chief interest. The candidates are enrolled as members of the teaching staff in these schools, and it is the business of the directors to make of them the best possible teachers. The work required by such men under such circumstances may be

more or less theoretical, according to their training and inclination, but it will surely be practical. The candidate must reduce his theory and his scholarship to actual practice in successful teaching. There is no sharp separation between theory and practice as there may be when instruction is given by university professors who have no direct acquaintance with the practical work of the schools. These directors are likely to be fairly well informed on pedagogical theory, and that theory has been illuminated by years of practical experience. They are at liberty to call to their assistance expert teachers of the subjects in which they themselves have not had special training, so that the direction of the seminar work is always in the hands of scholarly, expert, practical teachers.

Candidates and directors alike bend their efforts towards the attainment of practical results. Considerable knowledge of pedagogical theory on the part of the candidates may fairly be assumed, and the subject is further studied and discussed in the weekly meetings of the seminar, but the largest returns come through the actual teaching of the candidates under close supervision and criticism either by the director or by the special teacher to whom the work of a candidate has been assigned. They are usually given the lower classes, where the problem of method is much more evident than it is in the higher classes. It is real teaching, in a real school, under normal conditions, that is done by these candidates from the

beginning. They are held responsible for results, not for one hour only, but for the term and the year. They are not practicing, they are teaching; the pupils are not being practiced upon, they are being taught. The value of such teaching under careful criticism is infinitely superior as a means of training to an occasional hour of practice teaching. When this teaching by the candidate is supplemented by hours of observation of the work of other teachers, criticism in the seminar meetings of their work and his own, and the study of general pedagogical theory and of methods of teaching particular subjects, the practical training seems well-nigh ideal. The candidate learns to study and criticize intelligently his own efforts, and he forms the habit of making the work of each hour as effective as possible from the standpoint of good teaching. The writer can think of no better means for the training of teachers to both theoretical alertness and practical efficiency than that outlined for the work of the *Seminarjahr*.

It is true, of course, that ideal conditions are not always found in the real seminar. Candidates lack something and do not succeed. Directors may be more or less efficient, with the possibility always existing that the work may be unduly warped by individual prejudice. The directors of the higher schools are a much overworked body of men; the duties of the seminar add to their burdens, and often they do not have sufficient time to devote

to the needs of candidates. Not infrequently the teaching staff is so limited that the candidates are required to teach from fifteen to twenty-four hours per week from the start, thus having insufficient time for observation, for the preparation of their work, and for professional study. In such cases the director and the other teachers are likely to be very busy also, and consequently the teaching done by candidates is not properly supervised and criticized. They are left too much to their own resources. The scarcity of teachers in recent years has made this state of affairs somewhat common, to the regret of everybody concerned. From occasional reports the writer received the impression that the gymnasial seminars are not always as effective as they would be if the director had sufficient time to devote to the instruction of candidates and the supervision of their work, and if the candidates had about ten hours of teaching instead of either more or less. It occasionally happens that the candidate has too little teaching to do, even less than five hours per week. In such cases he is likely to become restless because he feels that he is simply marking time to no profit. This situation is as unsatisfactory as the opposite. Fortunately each seminar director is given much freedom in the work of his seminar, and it is reasonable to expect that out of the collective experience will ultimately come general agreement and greater wisdom in the conduct of the work. It seemed to the writer that

more theoretical pedagogical work might be expected of students in the university, thus leaving more time for a study of its application and for the consideration of practical pedagogy in the seminar. Two things militate against this end at present: the principle of absolute freedom in the selection of university courses, and the lack of opportunity for the study of pedagogy in some of the universities. When the gymnasial seminars were first established, it was feared by some that not enough competent schoolmen could be found to act as directors. That fear seems not to have been realized. The legal provision that a seminar may be discontinued at any time or removed from one school to another by the provincial school board is a safeguard against the continuance of a seminar in the hands of an incompetent director. Such defects as now exist in the work of the seminars are due mainly to conditions over which the directors have no control.

The *Probeyahr*, which has been part of the Prussian system since 1826, was originally designed to keep candidates out of the profession until they had demonstrated their proficiency by actual teaching. It was a year of testing rather than of training. Directors were officially urged to give careful supervision to the work of these young and inexperienced teachers, but no express provision was made for it, and the multiplicity of other duties prevented its effective accomplishment. The

result was that in the great majority of cases the *Probeyahr* was little more than a period of probation in which the candidate, without any particular assistance from others, had the opportunity to demonstrate his teaching ability. It was but natural that this should be regarded as unsatisfactory when educators began to think carefully about the training of teachers for the higher schools. Since the introduction of the *Seminarjahr*, the *Probeyahr* has remained as a time of further testing. There is not so much emphasis on training, since the candidate is usually not required to attend the meetings of a seminar or to follow any systematic course of professional study. However, the fact that he must make a written report at the close of the year concerning his work, and the knowledge that the work of this year is an important factor in making up his final record, serve to keep his attention fixed upon the professional character of his work, and the ultimate result is a considerable amount of training. When the candidate in the *Probeyahr* is assigned full work, that is, twenty-four hours per week, and is paid as an assistant, the year seems to serve a purpose without being a burden; but when he is given only a few hours of teaching and receives little or no pay, he is likely to become restless, and with good reason. The writer is disposed to share the opinion of a considerable number of German educators, that, if the work of the *Seminarjahr* were properly ordered and the time of the candidates

wisely divided between theoretical and practical studies, as good pedagogical results would be obtained from one year of training as are now secured from two, and the *Probejahr* would be superfluous. The present custom safeguards the profession at the expense of the individual candidate. When one takes into consideration the sharp competition for place in Germany, however, and the scrupulous care exercised by the government in the selection of teachers, it is easy to understand, and perhaps also to justify, the existing requirement.

Political, social, and industrial conditions in Germany are very different from those in the United States; nevertheless it seems to the writer that we could with profit follow Germany's example in some matters relating to the training of teachers. It may not be practicable now to require as high general academic scholarship of the teachers in our high schools as is required of the teachers in German secondary schools, but a considerably higher standard than now prevails is both desirable and feasible. The theoretical pedagogical training required of German teachers is not too much to ask of our high school teachers, and opportunities for securing it are available in many American universities. We may well look towards the ultimate adoption of a thorough special examination for high school teachers, an examination that shall give both safety and dignity to the calling. Especially should we adapt the work of the *Seminarjahr* and the *Probejahr* to

our needs. We either already have or we are rapidly developing facilities in our colleges and universities for the instruction of candidates in general academic subjects and in the theory of education, but there is yet lacking an institution that does the work of the German gymnasial seminar. It is needless to say that the *Seminarjahr* and the *Probeyahr* cannot be taken over entire; they would have to be modified and adapted to American conditions. The writer believes that adaptation may be secured by a combined effort of the high schools and the pedagogical departments of the colleges and universities, under the leadership of the latter. A plan for the accomplishment of this end is described in the following chapters.

PART II
THE TRAINING OF AMERICAN TEACHERS

CHAPTER VII

THE CERTIFICATION OF AMERICAN TEACHERS

IN the light of Germany's past experience and present practice it is purposed to discuss in the following chapters the training of teachers for American secondary schools. It is evident that the conditions under which the work of education is carried on in the two countries are very different, and that consequently nothing can be taken over from one country to the other without proper adaptation to existing conditions; but this fact should not prevent us from adapting to our own need and incorporating into our own educational systems those elements which they do not now possess, but which have proved themselves eminently satisfactory in the German system.

The Sphere of the American Secondary School. — This discussion assumes the sphere of the secondary school to be that covered by a four-year program of studies, following an eight-year elementary school course, as it is found in the ordinary American high school. Such a program provides for from one half year to four years of work in each of several selected subjects. The list of subjects from which choice is made includes English, Latin, Gree

German, French, advanced arithmetic, algebra, geometry, trigonometry, drawing, ancient, medieval, and modern history, history of the United States, civil government, economics, physical geography, botany, zoölogy, biology, physics, chemistry, music, stenography, type-writing, bookkeeping, commercial geography, commercial law, manual training and the household arts. The course covers approximately the years from fourteen to eighteen, although a few pupils enter before fourteen and a considerable number remain beyond the age of eighteen. The discussion would apply equally well if the entire course of study were reorganized so that the elementary school and the high school would have six years each.

The Standards of Certification of high school teachers in the different states of the United States represent wide difference of practice. Before the year 1900 not more than a half dozen states possessed a legal standard of certification for high school teachers which was different from that required of teachers in the elementary schools. In the other states the holder of any certificate of any grade was legally qualified to teach in the high school; moreover, in nearly half of the states this is true at the present time. That is to say, only recently has there been any legal recognition of difference between the training needed for the teacher in the elementary school and that needed for the teacher in the high school. The minimum qualifications required of the former have usu-

ally been very low, even for the elementary school work. They were, of course, even less satisfactory for the high school.

The present legal requirements for the certification of teachers in the different states, especially those enacted since 1900, show a tendency to differentiate between the training required of high school teachers and that required of elementary school teachers. Such provisions as now prevail where a distinction is made are given in brief on the following pages. With a few exceptions they are interesting as indicating the present low standards and the steps by which progress is effected, rather than as expressing any satisfactory permanent standards.

Alabama. — "No teacher shall be eligible to teach in any high school established under the provision of this article, unless holding a first-grade or life certificate."¹

"For first-grade certificates they shall be examined in all the (common) branches and also in algebra, natural philosophy, geometry, the school laws of Alabama, and the theory and practice of teaching."²

A life certificate may be granted to an applicant who has taught successfully for six years under a first-grade certificate.³

Arkansas. — "The license held by the teacher must show that the holder has passed a satisfactory examination on each subject he teaches."⁴

¹ School Laws of Alabama, 1908, Sec. 1865, p. 61. Enacted 1908.

² *Ibid.*, Sec. 1734, p. 25.

³ *Ibid.*, Sec. 1741, p. 27.

⁴ Letter from office of State Superintendent.

California stands far ahead of any other state in the requirements for high school teachers, and therefore they are given in full.

"EXTRACTS FROM THE POLITICAL CODE OF CALIFORNIA

"Section 1521. The powers and duties of the State Board of Education are as follows: . . .

"2. (a) To prescribe by general rule the credentials upon which persons may be granted certificates to teach in the high schools of this state. No credentials shall be prescribed or allowed, unless the same, in the judgment of said board, are the equivalent of a diploma of graduation from the University of California, and are satisfactory evidence that the holder thereof has taken an amount of pedagogy equivalent to the minimum amount of pedagogy prescribed by the State Board of Education of this state, and include a recommendation for a high school certificate from the faculty of the institution in which the pedagogical work shall have been taken.

"(b) The said board shall also consider the cases of individual applicants who have taught successfully for a period of not less than twenty school months, and who are not possessed of the credentials prescribed by the board under the provisions of this section. The said board in its discretion may issue to such applicants special credentials upon which they may be granted certificates to teach in the high schools of the state. In such special cases, the board may take cognizance of any adequate evidence of preparation which the applicants may present. The standard of qualification in such special cases shall not be lower than that represented by the other credentials named by the board under the provisions of this section.

"Governing Principles

"The State Board of Education, at its meeting held on December 4 and 5, 1905, gave thoughtful consideration to the question of high school certification. Upon invitation of the board a com-

mittee of the faculty of the University of California was present, and a thorough discussion of the matter was had, and as a result of such conference, the State Board of Education agreed to the following governing principles as expressing their interpretation of the powers and duties conferred upon said Board by Section 1521 of the Political Code, in reference to high school certification:

“Four things are the evident intent of the law:—

“(a) That a high grade of both academic and pedagogical efficiency be maintained, the State University being taken as the academic standard.

“(b) That the State Board of Education shall be the sole judge of the professional standards to be maintained, and of the equivalence of credentials to University of California standards.

“(c) That nothing in the standards set by the general regulations of the board shall unjustly prevent the certification of fit individuals who cannot technically meet the requirements of such rules.

“(d) That no state institution, or set of state institutions, as such, shall be permitted to control secondary certification. The aim is squarely the efficiency of the secondary teaching service. The responsible judge and authority is the State Board of Education.

“Minimum Amount of Pedagogy

“The minimum amount of pedagogy which Section 1521, subdivision 2 (a) of the Political Code, directs the State Board of Education to prescribe, is hereby declared to be as follows:—

“Satisfactory completion of courses, suitable and essential to requiring efficient skill in teaching and an intelligent comprehension of the scope, and the attainable goals in high school instruction; said courses to be equivalent to not less than twelve hours per week for one half year; provided that at least one third of this work shall consist of practical teaching under the direction of supervising instructors of academic competency and breadth

of pedagogic comprehension who for a period of not less than two years have taught the subjects in which they supervise.

"The State Board of Education is not authorized by Section 1521 to specify institutions in which this prescribed pedagogy may be taken, but as standards of equivalents the certificate from any institution belonging to the Association of American Universities, or from any California State normal school, or their recognized equivalents, may be accepted, provided that the recommendation of applicants by faculties of institutions in which the pedagogical courses are pursued attests that the requirements above stated have been fulfilled.

"Rules for the Granting of High School Certificates

"In pursuance of the above-mentioned principles, the State Board of Education has formulated the following rules for the granting of high school certificates: —

"1. High school certificates may be issued under the provisions of Section 1521, subdivision 2 (a), and Section 1775, subdivision 1 (a), of the Political Code of California, as follows: —

"a. To candidates who have received the bachelor's degree from a college requiring not less than eight years of high school and college training, and who submit evidence that in addition to the courses required for the bachelor's degree they have successfully completed at least one year of graduate study in a university belonging to the Association of American Universities; which year of graduate study shall include one half year of advanced academic study (part of the time, at least, being devoted to one or more of the subjects taught in the high school), and such other time in a well equipped training school of secondary grade directed by the Department of Education of any one of the univer-

sities of the association, as may be necessary to fulfill the pedagogical requirements prescribed by this board.

“b. To candidates who have received the bachelor's degree from a college requiring not less than eight years of high school and college training, and who submit evidence that in addition to the courses required for the bachelor's degree they have successfully completed at least one half year of graduate study in a university belonging to the Association of American Universities; which half year of graduate study shall consist of advanced academic study (part of the time at least being devoted to one or more of the subjects taught in the high school); and six months as student teachers in a well-equipped school of secondary grade directed by a California state normal, or its recognized equivalent, under conditions conforming to the requirements prescribed by this board as the minimum amount of pedagogy.

“2. In lieu of the pedagogical training above prescribed, candidates may submit evidence showing that they are graduates of a California state normal school, or other normal school officially recognized by this board as of equivalent rank, or have taught with decided success as regular teachers or as principals at least twenty months in any reputable school, elementary or secondary; and provided that until further notice, the practical teaching prescribed may have been pursued in schools of grammar or secondary grade in connection with a California state normal school, or under the direction of the Department of Education of the University of California or of Leland Stanford Junior University, as evidenced by a certificate of proficiency.”¹

Colorado. — “If the applicant is to teach in a school of high

¹ Bulletin No. 99, California Department of Education, August, 1906, p. 47.

grade, the examination shall extend to such additional branches of study (beyond the common school branches) as are to be pursued in such school.”¹

“In first-class districts, the school board may employ high school teachers without examination, if they give evidence of adequate training for the work they are to do. In all other districts, applicants for high school positions are required to take the regular county examination and in addition be examined in the subjects they expect to teach in the high school.”²

Connecticut. — “The board of school visitors or town committee” shall “examine all candidates for teachers in such (high) schools, and give to those of satisfactory moral character, literary attainments, and ability to teach, a certificate stating what branches they are capable of teaching.”³

District of Columbia. — “No person without a degree from an accredited college, or a graduation certificate from an accredited normal school, such normal school graduate to have had at least five years of experience as a teacher in a high school, shall hereafter be appointed to teach any academic or scientific subjects in the normal, high, and manual training schools; provided, that no such teacher in the normal, high, and manual training schools, or teacher of special studies shall be appointed until he shall have passed an examination prescribed by the boards of examiners hereinafter provided for.”⁴

Florida. — “Under a regulation of the State Board of Education the principal of a senior high school must be the holder of a state certificate, and the principal of a rural graded school or junior high school must be the holder of a first-grade certificate.”⁵

¹ School Laws, 1909, Sec. 5991, p. 96.

² Circular letter from State Superintendent of Public Instruction.

³ School Laws, 1908, Sec. 67, p. 22.

⁴ Rules and By-laws of the Board of Education of the District of Columbia, 1907, p. 17.

⁵ Letter from William M. Holloway, State Superintendent of Public Instruction.

Indiana has four forms of high school license. The following provisions concerning it are made by the State Board of Education.

"(a) Twelve Months. — Valid to teach the subjects designated in any public high school of the state for a period of twelve months. The eligibility and grade requirements are precisely the same as for a twelve months common school.

"The subjects are: Latin, German, French, Spanish, literature and composition, history and civics, physical geography, commercial geography, zoölogy, botany, physics, chemistry, commercial arithmetic, algebra, geometry, bookkeeping, and stenography. From this list the applicant selects the subjects he expects to teach. An applicant may have a license if he makes the required grades and average on a majority of the subjects attempted. In all literature examinations the manuscript is graded from 0 to 75 on correctness of answers and from 0 to 25 on the quality of English used.

"(b) Twenty-four Months. — Valid to teach the subjects designated in any public high school of the state for a period of twenty-four months. The eligibility and grade requirements are precisely the same as for a twenty-four months' common school. To secure this license the applicant must pass successfully in *five* or more of the subjects named in (a).

"(c) Thirty-six Months. — Valid to teach the subjects designated in any public high school of the state for a period of thirty-six months. The eligibility and grade requirements are precisely the same as for a thirty-six months' common school. To secure this license the applicant must pass successfully in *five* or more of the subjects designated in (a).

"(d) Sixty Months. — Valid to teach the common branches in any public school of the state and the designated high school subjects in any public high school of the state for a period of sixty months. The eligibility requirements are the same as for a thirty-six months' common school.

"The examination for this license is taken in two divisions. The First Division is upon the common branches. The grade and average requirements are the same as for a thirty-six months' license. No license is issued upon first-division results. The Second Division includes the high school subjects. These are arranged in five groups with requirements as indicated.

- "I. Literature and composition (required).
- "II. Algebra or geometry (one required).
- "III. Botany, zoölogy, chemistry, physics, or physical geography (one required).
- "IV. History and civics, Latin, German, French, or Spanish (one required).
- "V. One subject not already taken, to be selected from II, III, IV.

"Five subjects selected as above are required. The applicant may if he chooses pass upon additional high school subjects and have them properly entered upon the license. Upon the high school subjects the average must be 85 per cent with no grade below 75 per cent. Both divisions must be taken in one calendar year. An applicant who fails on the second division may at the end of the year receive a license upon the first division, provided the grades warrant it."¹

Kansas. — "The board of trustees (of a county high school) shall appoint some competent person who, with the principal of the high school, and with the county superintendent of public instruction as chairman thereof, shall constitute the examining committee of the high school, whose duty it shall be to examine all persons who may apply to them in the subjects such persons propose to teach in said high school; and no person except one holding a diploma or a certificate from the State Board of Education, or a

¹ Notes on Indiana Teachers' Licenses, 1910, by R. J. Aley, State Superintendent of Public Instruction.

diploma from the State Normal School, State University, State Agricultural College, or some college or university accredited by the State Board of Education, shall be employed by the board of trustees as a teacher in the high school, unless such person is the holder of a certificate signed by the examining committee, or a majority of them, setting forth that such person is competent to teach such subjects in said high school, and is a person of good moral character.”¹

“The above statement represents only the law relative to the granting of certificates to teachers of county high schools. It is the only certificate, however, that is issued exclusively for high schools. All county certificates and state certificates are valid high school certificates within the territory over which they extend. Cities having over 2000 inhabitants and other cities having ten or more teachers may provide their own standards for the issuance of certificates, and in those cases they fix a separate standard for high school teachers, and issue high school certificates.”²

Minnesota. — “The principal and all other teachers in the high school are to hold first-grade professional certificates, either upon diploma or by examination.”

“The subjects for professional examination are: —

- “I. Educational science, — general pedagogy, history of education, psychology, school organization and law.
- “II. Mathematics, — higher algebra, solid geometry, and trigonometry.
- “III. English, — American literature, English literature, and rhetoric.
- “IV. History, — ancient history, medieval and modern history, English history, and American history.
- “V. Science, — astronomy, botany, chemistry, geology and physiography, physics, political science, and zoölogy.

¹ School Laws, 1909, chap. VII, Sec. 161. Enacted 1907.

² Letter from State Superintendent E. T. Fairchild.

"For a first-grade professional certificate, the applicant, after having secured a first-grade common school certificate, must pass in *all* the branches headed *Educational Science*; *two* of those in *Mathematics*; *two* of those in *English*; *three* of those in *History*; *three* of those in *Science*—fourteen branches in all."¹

Montana.—“No person shall be employed as a teacher in high school, or as the principal teacher of a school of more than two departments, who is not the owner of a professional county certificate or the holder of a life or state diploma issued by the State Board of Education of the state of Montana, or who is not a graduate of some reputable university, college, or normal school.”²

Nebraska.—“Section 17. High School Teachers, Qualifications. On and after September 1, 1907, no person shall be granted a certificate to teach in the high school department of any high school district in this state who is not a graduate from a regular four-year course of a college or university, or a graduate from the advanced course of a college, university, or normal school in this state authorized by law to grant teachers’ certificates, or who does not hold a professional state certificate obtained from the state superintendent on examination before him or a committee appointed by him as provided by law.”³

Nevada.—“It shall be the duty of the County Board of Education to . . . employ teachers (for county high schools) holding Nevada state certificates of the high school grade in full force and effect.”⁴

“The high school certificate, good for four years, shall entitle the holder to teach in any school, and shall be issued upon satisfactory examination in all the subjects mentioned in Sections 15 and

¹ Circular of Information Relating to Examinations, Certificates, and the Employment of Teachers. Issued by the Department of Public Instruction, June, 1908.

² School Laws, 1909, Sec. 968, p. 134. Enacted 1897.

³ School Laws, 1907, p. 59. Enacted 1905.

⁴ School Laws, 1909, chap. VIII, Sec. 7, p. 55. Law enacted 1909.

16 of this Act (common school branches, algebra, the first and second books of plane geometry, English, history, bookkeeping, physical geography, physics, chemistry, and methods of teaching), and in addition thereto, botany, Latin, general history, English literature, plane geometry, astronomy, rhetoric, civil government, and the history and methods of teaching.”¹

New Hampshire. — “There is no requirement under the law for the various certificates, but the State Department of Public Instruction has made regulations for these certificates which it has the right to do. At the present writing there are three grades of certificates issued.”²

HIGH SCHOOL CERTIFICATE. — “Candidates must present satisfactory evidence of education adequate to prepare them for the work of the grade for which the certificate is asked.

“They will present themselves for examination in the following groups of subjects: —

- “I. History of education, psychology, pedagogy, the school law of New Hampshire, and school management with special reference to the problems of the adolescent period.
- “II. English literature, including American authors; English grammar and the principles of rhetoric; composition — to be determined by the general character of papers; either Latin, Greek, French, or German; either physics, chemistry, or biology; algebra through quadratic equations; plane geometry; history of the United States and the history of either Greece and Rome, medieval and modern Europe, or England; and civil government.
- “III. An examination to test special proficiency in one of the following departments of study at the election of the candidate: the English language and literature; the Greek and Latin languages and literatures; the French and German lan-

¹ School Laws, 1909, chap. II, Sec. 17, p. 19.

² Letter from office of State Department of Public Instruction.

guages and literatures; history; physics and chemistry; biology; mathematics; or commerce.

"Probationary certificates valid for one year from the date thereof will be granted to those candidates who attain a general average of 70 per cent and do not fall below 50 per cent in any subject. Candidates for such certificates may omit the third part of the examination.

"Candidates who present required evidence of graduation from a registered college or institution of collegiate degree will be exempt from examination in Group II.

"Candidates for secondary certificates will be allowed to file certificate of college standing in advanced courses of a registered college in lieu of examination in subjects of Group III."¹

North Carolina. — "The board of examiners, under the direction of the State Superintendent of Public Instruction, shall examine all teachers who apply to the State Superintendent for a high school teacher's certificate, and said examination shall be conducted in the same manner as the examination for state certificates."²

"All teachers in high schools (176 rural) *must* hold the high school teacher's certificate from the State Board of Examiners."³

North Dakota. — "The superintendent, high school principal, and assistants in high schools of the first class and of the second class shall hold the B.A. or equivalent degree from some college or university of recognized standards. Exceptions may, in special cases, be made by the high school board, but the superintendent, high school principal, and assistants shall, in cases above excepted, be duly qualified by holding state life professional certificates. The high school board is always to be the judge of evidence upon

¹ Abstract of Regulations governing State Examination and Certification of Teachers in the Public Schools.

² The Public School Law of North Carolina, 1909, p. 68, Sec. 4162.

³ Communication from the office of the State Superintendent.

which to make exception. Further, the principal of a third-class high school, if not the holder of a B.A. degree or an equivalent degree or a life professional certificate, shall be a graduate of some normal school of recognized standards, or shall have completed at least one half of the course for the bachelor's degree in some college or university of recognized standards and shall present satisfactory credentials to the high school board.”¹

Ohio. — “No person shall be employed or enter upon the performance of his duties as a teacher in any recognized high school supported wholly or in part by the state in any village, township, or special school district, or act as a superintendent of schools in such district, who has not obtained from a board of examiners having legal jurisdiction a certificate of good moral character; that he or she is qualified to teach literature, general history, algebra, physics, physiology including narcotics, and, in addition thereto, four branches elected from the following branches of study: Latin, German, rhetoric, civil government, geometry, physical geography, botany, and chemistry; and that he or she possesses an adequate knowledge of the theory and practice of teaching (R. S. Sec. 4074).”²

Oregon. — “All teachers employed in high schools organized under the provisions of this Act [the law refers to district, county and union high schools] shall be graduates of the state normal schools of this state, graduates of some institution of collegiate or university grade, or shall be the holder of a state certificate or diploma.”³

“The examination for state certificates and state diplomas shall be upon questions prepared by the state board of examiners; said questions shall be based upon the textbooks adopted by the state,

¹ Manual of the High School Board of North Dakota, 1909, p. 11.

² School Laws, 1910, p. 139, Sec. 7831.

³ School Laws of Oregon, 1907, Sec. 233 and 253, pp. 109, 121. Enacted 1903.

and shall cover all the branches required for a first-grade county certificate, and, in addition thereto, algebra, bookkeeping, composition, physical geography, physics, and psychology; those for state diplomas, in addition to the foregoing, botany, plane geometry, general history, and English literature. Examinations for state certificates and state diplomas shall be conducted in accordance with the rules and regulations adopted by the State Board of Education, consistent with the laws of the state. A state certificate shall authorize the holder thereof to teach in any public school in the state for five years thereafter, and the state diploma shall confer a like authority for life. State certificates shall be granted to such applicants only who have had thirty months' teaching experience with approved success, at least nine of which shall be in the schools of Oregon, and who shall make an average of 85 per cent in all the branches herein prescribed and shall not fall below 70 per cent in any one branch. State diplomas shall be granted to such applicants only as have had at least sixty months' teaching experience with approved success, fifteen of which shall have been in the schools of Oregon, and shall have made an average of 85 per cent in all the branches herein prescribed, and shall not fall below 70 per cent in any one branch. Any applicant for a state certificate or a state diploma who shall attain the required percentages in one or more of the designated branches, but shall fail in one or more of such branches, shall be credited with such required percentages, and shall be allowed to complete the examinations in the remaining branches at the two following examinations, and shall then receive a state certificate or state diploma, in accordance with the result of all the examinations."¹

Pennsylvania. — "CXII. The directors or controllers of every district receiving aid in accordance with section four of this act, shall employ for said high school at least one teacher legally certified to teach bookkeeping, civics, general history, algebra, geometry, trigonometry, including plane surveying, rhetoric, English

¹ School Laws, 1907, Art. II, Sec. 6, pp. 5, Code 3348.

literature, Latin, including Cæsar, Vergil, and Cicero, and the elements of physics, chemistry, including the chemistry of soils, botany, geology, and zoölogy, including entomology, and no teacher shall be employed to teach any branch or branches of learning other than those enumerated in his or her certificate.”¹

Rhode Island. — “In Rhode Island there are no state legal requirements for high school teachers different from that of elementary school-teachers. It is true, however, that by general understanding our first-grade certificate is a high school certificate. There are very few teachers in our Rhode Island high schools who do not hold such a certificate. To obtain this certificate one must be a graduate of an approved college, and must possess professional qualifications. Professional qualifications are determined by an examination in history of education, psychology, philosophy of education, school management, methodology, school hygiene, and school law. Certificates of graduation or of completion of certain courses in approved normal schools or education departments of colleges are accepted as evidence of professional qualifications in lieu of an examination. It is also probable that before long a special high school certificate will be required for teaching in high schools. That will mean little more than making a legal requirement of that which is in general practice.”²

South Dakota. — “A high school teacher must be the holder of a state certificate or life diploma.”³

“The State Department of Public Instruction will grant life diplomas; First: to applicants who shall pass a satisfactory examination in *reading, orthography, penmanship, arithmetic, geography, grammar, composition, United States history, South Dakota history, physiology and hygiene, civics, physical geography, physics, algebra, geometry, and general history*, all of the pre-college grade; in English language and rhetoric, English and

¹ School Laws and Decisions, 1909, p. 54, CXII. Enacted 1895.

² Letter from Commissioner Walter E. Ranger.

³ Letter from State Superintendent H. A. Ustrud.

American literature, either economics or sociology, any two of botany, zoölogy, physiology, physics, chemistry, Latin, German, geology and mineralogy, astronomy, algebra, trigonometry, all of the college grade; and in pedagogy, including principles, method, management, psychology, and history of education.

"Possessors of first-grade certificates, issued by State Educational departments, may submit corresponding standings on them for the subjects italicized in lieu of examination, if the grades in such subjects average 90 per cent with no grade below 75 per cent, and were awarded by a state board of examiners.

"Candidates for this credential are required to notify the Department of Education, three months in advance of the examination, stating the subjects they have selected where alternatives are offered.

"Evidence of at least forty months' experience and good moral character is required. Examination is offered in March and August.

"Second: to applicants who are graduates of the State University of South Dakota, or of any other approved college, having a course of study wherein four years' work above an approved high school course of four years is required for graduation. If the applicant has in his college course pursued one course of pedagogical studies and professional training comprising at least one fourth work during at least eighteen months. If the candidate is short on pedagogy, the condition may be removed by examination.

"The applicant must file with the department a copy of the diploma of graduation, copy of the course of study, specifically showing the amount of class work and standing secured in each subject for the entire course, all duly certified by the proper officer of the institution where subjects were pursued. The candidate must show a record of forty months' successful experience as a teacher.

"Third: to applicants who are graduates of the normals of this state or other normals where a course of study of at least two years beyond an approved high school course of four years is required. The applicant must file with the department certified copies of

diploma, course of study, outline of work, and standing secured in each subject as in "two" above. Evidence of forty months' successful teaching experience must be submitted.

"The law requires a fee of ten dollars from all applicants except graduates of the institutions of this state.

"The department will validate credentials of this class, issued by other state departments on equivalent requirements, but prefers that such applicants work in South Dakota for at least one year on a state certificate.

"State certificates, good for five years, are renewable, and will issue; first: to applicants who shall pass satisfactory examination in *reading, orthography, penmanship, arithmetic, geography, grammar, physiology and hygiene, United States history, South Dakota history, civics*, American literature, drawing, algebra, plane geometry, physical geography, physics or botany, general history, pedagogy, English language, composition and rhetoric, provided that possessors of first-grade certificates issued by state departments of education may submit corresponding standings of such first-grade certificates in lieu of examination in subjects italicized, provided that such standings average 90 per cent with no grade below 75 per cent, and also provided that the grades were awarded by a state board of examiners and not by local authorities. Applicants must submit evidence of at least twenty-four months' successful teaching experience, and good moral character. Examination in March and August.

"Second: to applicants who shall have graduated from any of the state normals of this state having a course of at least one year's work in advance of an approved high school course of four years, provided such course shall embrace all the subjects required in the examination for state certificates as well as pedagogical instruction and professional training, comprising at least one fourth work for eighteen months; the candidate shall also submit evidence of at least eighteen months' successful teaching experience, and evidence of good moral character.

"A provisional certificate will be issued, valid for two years, to graduates who have all but the teaching experience above mentioned. Fee for the provisional certificate is two dollars, except to graduates of South Dakota institutions.

"Applicants will submit their credentials as provided in "two" of life diplomas.

"Third: to applicants who are graduates of any other institution of learning, requiring the completion of courses of study equivalent to the course of the state normals, provided that if the institution does not offer training in an established model department comprising all the grades below the high school, the candidate will furnish evidence of nine months' successful experience as a teacher, in lieu of such model training.

"The law requires the fee of five dollars from all applicants except from graduates of the institutions within the state. Any applicant desiring to have a state certificate renewed shall present satisfactory evidence of continued and successful teaching and satisfactory evidence of full attendance at a county institute during the current year.

"Applicants for state certificate on school credentials should read suggestions to such applicants for life diplomas."¹

Tennessee. — "A high school teacher in this state has to undergo an examination before the State Board of Education. He is examined on the subjects embraced in the course which he is licensed to teach."²

Utah. — "City high school certificates shall be granted only to applicants who pass satisfactorily the examination required for grammar certificates, and, in addition thereto, sustain a satisfactory examination in civil government, physical geography, elementary physics, elementary algebra, botany, and such other branches as the board of education may prescribe."³

¹ Circular of Information issued by State Department of Education, 1910.

² Letter from State Superintendent R. L. Jones.

³ School Laws, 1909, Sec. 1924, p. 98. Enacted 1897.

"Candidates for state professional diplomas of high school grade shall be required by examination or other evidence to exhibit a high degree of scholarship in all the following branches, namely: arithmetic, United States history, reading and elocution, orthography, English grammar, political and physical geography, physiology, algebra, physics, rhetoric, drawing, plane and solid geometry, botany, English literature, general history, civil government, history and science of education, and psychology; and also in any three of the following branches, namely: chemistry, geology, French, German, Latin, Greek, trigonometry, zoölogy, biology, and mineralogy."¹

"The State Board of Education has interpreted 'a high degree of scholarship' to mean a college education including the professional work in education and in other subjects required by law, and carrying with it a college degree. A state high school diploma is valid in the public schools of the state, while a city high school certificate authorizes the holder ~~to teach~~ ^{state} only in the school under the supervision of the board upon ^{upon a} ~~the~~ ^{the} courses of the certificate."²

Vermont. — "There is a condition ~~imposing~~ ^{imposing} course ^{course} prescription of courses for high schools that only college ~~graduates~~ ^{graduates} shall be employed."³

Virginia. — "Persons desiring to teach in the public high schools, or in schools where the higher branches are to be taught, shall be examined on such higher branches as they may be required to teach; provided, however, that the graduates of colleges and universities of approved standing and reputation shall be permitted, without further examination, to teach in such schools the branches in which they have graduated."⁴

Washington. — "City high school certificates (in cities having

¹ School Law, 1909, p. 4, Sec. 1767.

² Letter from State Superintendent A. C. Nelson.

³ From the office of the State Superintendent.

⁴ Regulations of the State Board of Education, 1907, p. 126.

one hundred or more teachers) shall be granted only to applicants who pass satisfactorily the examination required for grammar certificates, and in addition thereto sustain a satisfactory examination in civil government, physical geography, elementary physics, algebra, botany, and such other branches as the board of directors may prescribe.”¹

West Virginia. — “Applicants for teachers’ certificates shall be required to pass an examination in orthography, reading, penmanship, arithmetic, English grammar and language, physiology and hygiene, United States history, state history, geography, civil government, agriculture, and theory and art of teaching; and applicants for certificates good in the advanced grades of graded schools or high schools shall, in addition to the foregoing, be required to pass examinations in general history and single entry bookkeeping. Applicants for high school and primary teachers’ certificates shall pass an examination in such other branches as the Board of Education may prescribe.”²

Wisconsin. — ~~High school teachers should not neglect or fail to obtain~~ ^{idence of} ~~ary and proper legal qualifications. Without such qualif~~ ^{for state} ~~ent year.~~ ^{valid contract can be made with the high school board, nor} ~~teacher entitled to pay from the public funds.~~ Under no circumstances should the work of teaching be entered upon before the proper legal qualification has been obtained.

“Any high school board employing a teacher without legal qualification renders the high school district liable to loss of state aid.

“Any one of the following named documents is considered a sufficient legal and educational qualification for the position of principal or assistant in any high school: —

1. “The Wisconsin unlimited state certificate.
2. “A diploma granted upon the completion of a regular collegiate course in the University of Wisconsin, or upon the com-

¹ School Laws, 1909, Art. 5, Sec. 4, p. 90.

² *Ibid.*, 1909, Sec. 82.

pletion of the full course of any Wisconsin state normal school, *if countersigned by the state superintendent of Wisconsin.*

3. "A special license good for one year, issued by the state superintendent to the holder of either of the above diplomas.

4. "A special license good for two years, issued by the state superintendent and based upon a diploma from a state normal school located *outside* of Wisconsin whose courses of study are fully and fairly equivalent to the corresponding *advanced* courses in the Wisconsin state normal schools.

5. "A special license good for two years, issued by the state superintendent and based upon a diploma from a university or college located outside of Wisconsin whose courses of study are fully and fairly equivalent to the corresponding course of study in the Wisconsin State University.

6. "A special license good for two years, issued by the state superintendent, based upon an unlimited state certificate, granted to the applicant by legal authority in another state.

7. "An unlimited state certificate, based upon a diploma from a college or university in Wisconsin whose courses of study are fully and fairly equivalent to corresponding courses in the University of Wisconsin. The holder of this diploma must have successfully taught for at least *one year* in the public schools of Wisconsin, after graduation, before such certificate can be issued.

8. "An unlimited state certificate, based upon a diploma from a college or university *outside* of Wisconsin whose regular and collegiate courses of study are fully and fairly equivalent to corresponding courses in the University of Wisconsin. The holder of this diploma must have successfully taught for at least *two years* in the public schools of Wisconsin, after graduation, before such certificate can be issued.

9. "An unlimited state certificate, based upon a diploma from a state normal school *outside* of Wisconsin whose courses of study are fully and fairly equivalent to the advanced or four-year courses of study prescribed for the Wisconsin state normal schools. The

holder of such diploma must have successfully taught for at least *two years* in the public schools of Wisconsin, after graduation, before such certificate can be issued.

10. "A special license will be issued by the state superintendent when recommended by the state board of examiners, after said board has passed favorably on the papers, documents, credentials, and testimonials furnished by the officers of the institution from which the applicant has graduated, and such other persons as may be named or called upon for reference as to learning, good moral character, ability to teach, ability to govern, and ability to conduct and supervise a school."¹

Wyoming.—"The applicant shall pass an examination in all the subjects required for the second-class certificate (the common school branches, rhetoric and composition, and theory and practice of teaching) with the following additional subjects: elementary algebra, English and American literature, elementary psychology, physical geography, and any two or more of the following subjects: plane geometry, botany, zoölogy, chemistry, general history, Latin, German, political economy, bookkeeping, shorthand, securing an average of not less than 80 per cent, and not falling below 60 per cent in any one branch. An applicant for this class of certificate must have had not less than one school year of successful experience in teaching."²

The school laws of the different states indicate that, with the exception of the states before mentioned, no legal distinction has been made between the qualifications required for teachers in the high school and those required for teachers in the elementary school. In many of the states a certificate of any kind legally qualifies a

¹ Manual of the Free High Schools of Wisconsin, 1910, p. 4.

² School Laws, 1909, chap. 33, Sec. 1, p. 123. Enacted 1909.

teacher to serve in a high school. The fact that teachers possessing only certificates of lower grade are seldom found in the high school is due not to legal disability but to public opinion.

In about two thirds of the states certificates to teach in schools of all kinds are issued to holders of diplomas from state normal schools or colleges of accepted standing.¹ This fact shows a tendency to depend more upon training than upon examination as a test of competency. In some cases a specified amount of pedagogical training is required, in others no requirements of this kind exist.

From the foregoing facts, several things are evident: first, that in the certification of teachers there has been until recently little or no discrimination in the minds of the certificating authorities between the qualifications required for the work of the teacher in the elementary grades and those necessary for the work in the high schools; second, that with the exception of California no state has established a standard of qualifications for its high school teachers that is commensurate with the standard given in the Report of the Committee of Seventeen, which may be taken as the best official expression of

¹ Some sort of legal recognition is given such diplomas in Arizona, California, Colorado, Idaho, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

opinion upon the subject; third, that except in the case of California, no standard has been established which can be regarded as really professional; fourth, that in most of the states not only does no such standard exist, but no clear purpose or plan of establishing such a standard in the future is evident. The result is that the high school teacher cannot now feel that, legally considered, he belongs to a profession, nor does there appear much ground for hope that he can make such a claim in the immediate future. It is probably true that the exigencies of a new and undeveloped country have made these conditions excusable in at least a part of the past; but it would seem that the state should now squarely face the issue and place the work of the teachers in the high school upon a truly professional basis.

The Qualifications of High School Teachers.—Detailed information concerning the training of the teachers who are now at work in the high schools of the United States is not available, but their scholastic qualifications are doubtless much better than might be indicated by the legal provisions for certification. In the larger and better schools are many teachers who, to good academic training in the beginning, have added years of successful experience, and they are consequently well equipped for their work. Such teachers are occasionally found in the smaller schools also. Taking the country over, it is probably true that not more than fifty per

cent of the high school teachers are either graduates of a four-year college course, or have training equivalent to that required for such graduation; and that a much smaller number, probably not more than five per cent, have adequate pedagogical training or would be able to meet the requirements presented in the Report of the Committee of Seventeen.¹

Professor Thorndike gives the following statistics:—

“The number of years that the man engaged in secondary school work spent as a student in high school, normal school, college, or other institution beyond the elementary school, ranges from 0 to 13, or possibly higher in a few cases. There is no close adherence to any one type the country over, though 8 years is the most common length. The median length is 7 years. Of 100 men 10 have had less than 4 years beyond the elementary school, 45 have had from 4 up to 8 years, 30 have had 8 years, and 15 have had 9 years or more. Three fifths have had 6, 7, or 8 years. . . . The length of education beyond the elementary school in the case of women teachers ranges from 0 to 12 years, or possibly higher in a few cases. The typical condition is 8 years. There are somewhat more women who have had 8 years or more than those who have had 7 years or less. Of 100 women, 6 or 7 have had less than 4 years beyond the elementary school, 40 or 41 have had from 4 up to 8 years, 41 to 42 have had 8 years, and 11 or 12 have had 9 years or more.”²

Certain parts of the country, however, especially the New England states, New York and California, probably

¹ See Dexter, E. G., *Fourth Yearbook for the Scientific Study of Education*, Vol. I, p. 61.

² Thorndike, E. L., *The Teaching Staff of Secondary Schools in the United States*. United States Bureau of Education, *Bulletin*, 1909, No. 4, p. 14.

have a somewhat larger percentage of college-trained teachers in the high school. The rules governing the first high school established at Boston in 1821 provided "that it be required of the masters and ushers as a necessary qualification that they shall have been regularly educated at some university," and although this rule has not always been observed, there has everywhere been a strong traditional sentiment in favor of it.

The Need of Higher Standards. — Comparison of American standards of certification with those of Germany, and comparison of the actual qualifications of our teachers with those of Germany, or even with those outlined in the report of the Committee of Seventeen, shows the low standards of training that actually prevail among us. Germany insists upon having scholarly, well-trained teachers in her higher schools because they are the leaders of the future university students, who in turn become the leaders of the nation, and must, therefore, have the best training possible. The same reason exists for us, and also the added reason that these teachers are the trainers of that vastly larger number of boys and girls who do not reach the college, but who become the strength and support of the communities in which they live. They, too, should have the benefit of the best possible training. Detailed evidence of the need of better qualified teachers is not necessary here. That it is strongly felt by educators everywhere is indicated by the fact of

its emphasis in almost every serious discussion of means for the improvement of our schools. Well-trained teachers in every school would increase tremendously the efficiency and productive power of existing schools, and they would be an invaluable aid in working out some problems of school organization which are pressing for solution.

CHAPTER VIII

INSTITUTIONS FOR THE TRAINING OF TEACHERS

As indicated in a previous chapter the secondary schools have furnished the only school training for a small per cent of the teachers in our secondary schools. The institutions of most importance in this work, however, are the normal schools, colleges, and universities; and within the colleges and universities, the departments and schools of education. In a few instances, secondary schools coöperate with the college in giving opportunities for practice teaching.

Normal Schools. — The normal schools of the country, the first of which was founded in Massachusetts in 1839, were established primarily for the training of teachers for the elementary schools. The ordinary normal school course, which provides work extending only one or two years beyond the high school, has never been regarded by thoughtful educators as furnishing satisfactory training for secondary school work; but many normal school graduates have become high school teachers either without additional training or after having finished a college or university course.

The College as a Whole. — As in Germany, so in the United States, the college and the university taken as a whole have exerted a larger influence in the training of secondary teachers than any special professional institution established either within or without them. It is only within the last two decades that anything more than the usual academic college education has been considered necessary for the secondary teacher. The best ideals have always required this much, however. The teachers in the Latin grammar schools were graduates of the English universities or of Harvard or Yale; the academies sought college-trained men as teachers; and the same is true of the best class of high schools. The academic college course is now and always has been regarded as more important than any sort of purely pedagogical training.

Departments and Schools of Education. — There came a time, however, when it was thought desirable to add to this general college course, or, at least, to include in it, some definite pedagogical training. This has been accomplished through departments of education established in colleges or through teachers' colleges or schools of education established either in connection with colleges and universities or apart from them. The history of this movement is relatively recent. Professor Luckey¹ says

¹ Luckey, G. W. A., *Professional Training of Secondary Teachers*, chap. IV.

that up to 1890, work in education, looking particularly towards the training of secondary teachers, was established in the following-named institutions: Michigan University, 1879; The Johns Hopkins University (graduate work), 1881; Cornell University, and Ohio University (Athens), 1886; Columbia University (Teachers College) and Northwestern University, 1888; Clark University (graduate work), 1889; New York University and Illinois University, 1890. From 1890 to 1900 about twenty colleges and universities were added to the number, and the Report of the United States Commissioner of Education for 1909 contains a list of 171 colleges and universities in which there is at least one professor of pedagogy. This does not include the state normal schools which have organized a four-year course of study following a four-year preparatory course, thus becoming really normal colleges. It is in these institutions and others similar to them that the secondary teachers of the United States may now receive their training. The rapid increase in their number indicates the growth of interest in the professional training of secondary teachers.

The department of education in the college is itself a product of evolution. In the beginning a course of lectures on some phase of pedagogy was often given by a member of some other college department or by a practical schoolman from the outside. The work in education

was frequently regarded as an adjunct to the department of psychology or philosophy. As it developed, an independent department was established for it on a par with other departments of the college or university, and with its further development additional members were added to the instructing body. In most of the colleges and in many of the universities of the country this is the status of the work in education at the present time.

The teachers' colleges or schools of education or colleges of education, as they are variously called, are, in most cases, an outgrowth of the college department of education. Teachers College, Columbia University, was started as an independent institution and later attached to the university. A few institutions that may now fairly be ranked as teachers' colleges are simply normal schools that have extended their course of study to four years, as in New York, Indiana, and Iowa. As the work in education develops there appears to be a tendency to establish, in connection with the larger universities, schools of education, ranking with the colleges or schools of law, medicine, and engineering. In such cases the general academic work of students is usually carried on in the college of arts and sciences, and the distinctively professional work is done in the school of education. There are now such schools at Columbia University, New York University, Harvard, Syracuse, Cincinnati, Chicago, Leland Stanford Junior, Ohio State, Indiana, Illinois,

Iowa, Nebraska, Minnesota, Missouri, Colorado, Arkansas, Wisconsin, Nevada, and Wyoming, and the number increases with each year.

The theoretical professional work offered in these departments and schools of education, as shown in their announcements, includes the subjects of psychology, educational psychology, genetic psychology, the psychology of adolescence, principles of education, philosophy of education, history of education, secondary education, school management, school supervision, school administration, foreign school systems, school hygiene, sociology, and special study of the subjects that the student expects to teach along with the methods of teaching them. The subjects that are most common and that are required in the greatest number of cases are psychology, educational psychology, history of education, principles of education, observation, and methods of teaching the different subjects. A total of nine hours per week throughout one year may be regarded as approximately the amount of work given in the five or six subjects that are regarded as most necessary. The other subjects are offered as electives. The work is usually distributed over a period of at least two years.

¶ *The practical professional training*, or observation and practice work, given in departments and schools of education is very different in different institutions, and it is developing rapidly from year to year. In some cases

there is neither observation nor teaching by students. In other cases there is observation, either with or without direction by the department, but no teaching. In still other cases there is carefully directed observation and a few hours of teaching. And finally, there are a few places where systematic observation is followed by equally systematic teaching for a semester or a year. Both observation and teaching are carried on, sometimes in public schools over which the department has no control, sometimes in schools over which it has partial control, and sometimes in a school that is wholly under the direction of the department. Relatively few departments or schools of education have schools of their own. Notable exceptions are Columbia University and Chicago University, which have large private schools. The fact that the patrons of these schools pay high tuition fees and expect superior teaching in return makes it impracticable for students to do much teaching in them. They are more valuable for observation than for practice. Missouri University, on the other hand, has a practice school which is used for both observation and cadet teaching. Harvard, Brown, Indiana, Ohio State, Colorado, Oregon, Washington, California, Texas, and some others, use the local public schools for both observation and practical teaching. In most cases students are admitted to observation and practice teaching in the junior or senior year. Indiana requires practice teaching at least three hours per

week for twelve weeks, and seniors are admitted. California requires practice teaching at least four semester hours and graduation is a prerequisite.

The highest standard is maintained by Brown University, which admits only graduates to systematic observation and cadet teaching in the local high schools. Two types of student teachers are recognized. Those of the first type, four in number, are received as half time teachers who teach for one year under the careful supervision of the professor of education and a supervising teacher. The latter is a member of the high school corps who is recognized as a superior teacher. He is paid a nominal sum for his supervisory services and is given the privilege of attending certain university courses free of cost. The student teacher is paid \$400 for his year's work. The second type of student teacher is also a graduate. He is not given classes to teach regularly, but is required to give at least one hundred and twenty-four hours in observation, assistance to the regular teacher, the instruction of individual pupils, and the teaching of a class more or less irregularly. He receives no financial compensation. The teachers of both types are required to carry on a certain amount of university work under the direction of the department of education at the same time that they are doing the practical work in the schools. The guiding principles of the work at Brown University are given as follows:—

"1. The practice teaching must be under actual classroom conditions, and must cover a long period, not less than one year.

"2. The practice teaching must be open only to graduate students who have previously pursued courses in education, and not to undergraduate students.

"3. The practice teaching must be a part of the university work, and must count towards a degree as laboratory work in other departments counts towards a degree.

"4. The pupils in classes under student teachers must have conditions for their work at least as good as those under the average teacher in the school.

"5. The work must be so arranged that it shall be of advantage to the general system of the city schools, to the individual schools, to the student teachers, and to the university."¹

The above accounts of professional training are not designed to be exhaustive,² but they may be taken as typical of what is being done in the various institutions, and they show the generally undeveloped state of this phase of the training work.

¹ Proceedings of the National Society of College Teachers of Education, 1909. Article by W. B. Jacobs.

² For a more complete study of the professional work given in colleges and universities, the reader is referred to "The Present Training of Teachers for Secondary Schools," by E. G. Dexter, in the Report of the Committee of Seventeen; to "Observation and Practice Teaching in College and University Departments of Education," by F. E. Farrington, and others in Proceedings of the National Society of College Teachers of Education, 1909; and to "The Relation of the Department of Education to Other Departments in Colleges and Universities," by F. E. Bolton, in Journal of Pedagogy, Vol. XIX, Nos. 2-3. December, 1906; March, 1907.

CHAPTER IX

WHO IS RESPONSIBLE?

IN a matter of such great and general importance as the proper training of teachers for the public high schools, many institutions and many individuals must share responsibility. Those upon whom the burden falls in this case are the state, individual teachers, the colleges and universities, and the schools.

The Responsibility of the State. — Early in their history the American colonies accepted the principle that the education of their children must not be left to individual or philanthropic initiative, but is a duty devolving upon the state. Because it is the creator and also the beneficiary of the public school system, the state is responsible for the standard of qualifications of its teachers. Through its system of public education a nation develops, controls, and perpetuates its ideals and its policies. In a nation's schools is reflected the nation's life. The class schools of England and Germany can exist only in a country where there are marked class distinctions. The democratic schools of the United States can exist only in a democratic society. State schools are not

founded in a spirit of philanthropy or for the purpose of promoting the welfare of the individual, though, doubtless, both of these ends are served; they are established that the state may possess intelligent, patriotic citizens who will serve its interests wisely and loyally. As creator and beneficiary, the state is responsible not only for what the schools have been and are, but also for what they are to be; and since the teacher is the most important factor in determining the character of the school, the teacher's qualifications lie at the very heart of the state's responsibility.

Having committed itself to the policy of education at public expense, the state is responsible for such a development of the public school system as will produce not simply the largest returns, but the greatest possible per cent of returns on the money invested. Doubtless the public schools as they exist are abundantly worth their cost; nevertheless they can be made to yield not only larger returns as a whole, but a much larger per cent of returns on the investment. To do this will require more intelligent care and the investment of more money, but as a mere business proposition it should be done. Under such circumstances nothing except inability to secure the needed funds would deter a wise, aggressive business man from developing his plant. If the state fails, it is not showing good business sense, and it is responsible for the loss entailed. This principle is applicable at every point

at which the possibility of improvement is shown, hence it applies to the training of teachers. The state is just as much responsible for the development of the highest possible efficiency in its system of education as it was for the establishment of the system itself.

Again, the state is responsible because it is the only authority that is competent to deal with the situation. The effective establishment of an adequate professional standard for the certification of high school teachers must ultimately depend upon legal enactment. In a democracy, true enough, it is useless, even when it is not impossible, to pass laws which are too far in advance of public opinion; but progressive laws enacted by the leaders of the people often serve to crystallize public sentiment in their support, at the same time that they make increased demands upon public service. At all events, there can, in this case, be no well-founded progress that is not based upon legal enactment. A considerable number of individuals may voluntarily make the desired preparation, but there will surely be some, and probably many, who will not. They can get on without the expenditure of time, money, and effort in preparation. Why should they make it? Who is prepared to say that they are wholly at fault? They have fulfilled the demands of society and the state. On the other hand, those who prepare themselves well for the work soon become painfully conscious of the fact that they are given no advantages which are

at all commensurate with the additional preparation that they have made, and they become justly dissatisfied. There can be no profession of teaching until the state establishes a standard of certification that is worthy of the profession which it seeks to establish. The higher standard can be actually realized only through the assistance of the strong arm of the law.

In the present case there seems to be special responsibility because the teacher is the strategic point in the whole educational enterprise. Care and money invested in improving his qualifications will bring larger returns than if invested in any other part of the business. In a system of public education as loosely organized as ours, much more depends upon the efficiency and power of initiative of the teacher than is the case in a closely organized and supervised system like that of Germany. To improve the efficiency of the teacher is at once to improve the quality of his own teaching, to avoid some of the errors due to our present organization, or lack of it, and to provide a helper who can be of material assistance in working out some needed reforms. A competent teacher can overcome the disadvantages of bad system or no system. On the other hand, no amount of system or organization can flourish in the hands of incompetent teachers. From whatever point of view the subject is regarded, it is undoubtedly true that more speedy and substantial results will follow from the improvement of

the teaching force than from anything else. Better qualified teachers are needed to secure better work under existing conditions, to help devise better plans, and to assist in carrying out reforms when they are undertaken.

The responsibility of the state in this matter seems to be further increased by the fact that the institutional means for the training of high school teachers are already in existence and are ready to be organized for this purpose. It is not necessary to create new institutions or even, in many cases, to increase largely the expenses of those already existing. These institutions are the colleges, the universities, and the secondary schools, especially the public high schools. Under the authority and leadership of the state it should not be difficult to bring about a coöperative effort on the part of these institutions, which would effectively accomplish the desired end. A plan of procedure is outlined on later pages.

It must be freely granted, however, that in many states the establishment and maintenance of a standard of qualifications equal to that required of teachers in the Prussian higher schools, or to that which leading American educators would accept as satisfactory for teachers in our high schools, would now be impossible. Either public sentiment would not accept the standard, or facilities are wanting for the training of teachers, or salaries are so low that no teacher can afford to make such preparation.

Where such conditions exist, it would, of course, be folly to adopt at once an impossible policy and place on the statute books a law concerning the certification of high school teachers, which could not be carried into effect. The best that can be done under such circumstances is to recognize the unsatisfactory conditions and adopt a standard that is consistent with those conditions. In the formulation of such a standard, however, it is always possible to make it a step towards a higher one, one that would be satisfactory. Not infrequently it is possible to adopt a higher standard, with the provision that it shall not go into effect until such a date as will enable every one concerned to meet its conditions. Teachers who are already in the service can be left undisturbed, and the new provisions be made to apply to those only who enter after this specified future date. The one important fact in all cases is that state legislation on the subject is a crying necessity; and if the present unsatisfactory standards in the work of the high schools are not to continue, legislators must face the need squarely and either provide for the immediate adoption of a really professional standard for teachers, or for the adoption of standards lower than this which shall, nevertheless, be a definite step in the desired direction. To do less than this is to ignore the need entirely.

The Responsibility of the Individual Teacher. — But even in those cases in which the state either cannot or

will not provide for the establishment of an adequate standard of qualifications in the certification of high school teachers, the situation should not be considered hopeless. If it is true that Germany is a land of strong, centralized authority and paternalistic government; it is no less true that the United States is the country of freedom and of individual and institutional enterprise.

That which is handed down from above in the former can grow up from below in the latter. Individuals and institutions have opportunities and responsibilities. The individual teacher or prospective teacher who sees the need can do no more patriotic service than to give himself the training which his vocation requires, even though the state does not demand it of him and neither pays him well for his work nor protects him from the rival claims of those whose training is much inferior. Fortunately many teachers are now doing this to the limit of the opportunities offered for such training, and an increasingly large number will do it if the needs of the work can be properly brought to their attention and if opportunities can be provided for such training. In a cause so worthy, it seems entirely in order to appeal to the patriotism and professional ambition of individuals, even though some hardship may seem to be involved. To the consciousness that really effective service has been rendered, there will in time usually be added an appreciable gain of a more material character. The capable man or woman

who prepares himself well for his work is pretty sure to find reasonably satisfactory promotion awaiting him.

The Responsibility of College and University. — Upon colleges and universities there rests a peculiar responsibility in this matter. If the state has already adopted a satisfactory standard in the certification of high school teachers, the burden of providing the necessary training falls upon these institutions; and, because of the great number of teachers who leave the work each year, that burden is not a light one. It would probably tax to the utmost the present capacity of every college in every state in the union to turn out each year enough properly equipped candidates for the position of high school teacher to take the places of those who, for various reasons, leave the work. In many states the existing equipment of the higher institutions is totally insufficient for this purpose. The success of the state in carrying out its policy is absolutely dependent upon the efficiency of the higher institutions in providing facilities for the necessary training.

If, on the other hand, the state has not adopted a satisfactory standard of training for the certification of high school teachers, scarcely less responsibility rests upon the college and university. In the interest of scholarship in general and of their own individual students in particular, it is their duty to foster all means that tend to the better preparation of future college students; and nothing will

contribute as much to that end as providing every preparatory school with well-trained teachers. As leaders of public sentiment it is their duty to favor measures for the general public good, especially in the field of education. And as the only institutions which can do the work required in the proper training of teachers, it is their privilege and, to the limit of their ability, their duty to show in advance their willingness and readiness to co-operate in the execution of a movement that lies so close to the public welfare. How can ambitious individuals secure the training to which they aspire if the higher institutions do not provide for it? And how can practical-minded state legislators be expected to provide for a satisfactory standard of training for certification if they are confronted with the fact that the educational institutions of the country, and especially of their own state, are not equipped to furnish such training?

The Responsibility of School Authorities. — In the development of a proper standard of qualifications and of certification of high school teachers, the school authorities — principals, superintendents, and governing boards — have an exceedingly important part to play. In the first place, they should express practically, in the choice of their teachers, a preference for those who have had good training. As a matter of fact this is not now done in any satisfactory manner. In many cases there is no insistence upon college training or its equivalent, the emphasis

being placed upon experience regardless of whether it has been in the high school or in the grades. In other cases the applicant for a position must have had college training and experience in teaching in some other school, but no importance is attached to special pedagogical training. In relatively few cases do employers of high school teachers show any considerable regard for training which involves both the academic and the pedagogical side. There are several reasons for this state of affairs. Teachers are often selected by members of a school board who cannot, in many cases, be expected to have sufficient knowledge of what constitutes good training. Unfortunately the same thing may be said about some superintendents and principals. In other cases the pedagogical training that has thus far been available has not commended itself as being very valuable. In still other cases the value of such training, when it is of the right kind, has been fully recognized, but the scarcity of applicants possessing it is so great that it cannot be demanded of all applicants. The ignorance of employers, the unsatisfactory character of certain forms of pedagogical training, and the scarcity of applicants who have been well trained, have combined to produce this lack of practical interest on the part of school authorities. When, in the selection of a teacher for the high school, the same preference is given to the applicant who has good pedagogical training, as is now usually shown the normal school graduate who

applies for a position in the grades, the proper pedagogical training of high school teachers will have been given a great stimulus. The burden of this attainment rests upon the authorities of the high school.

In the second place the school authorities are responsible for coöperative assistance in the training of high school teachers. A certain class of high schools, usually the smaller ones, have for years been taking as teachers young college graduates who are innocent of both experience and pedagogical training. The opportunity thus afforded these young men and women is not one of training for their work under competent direction, but rather that of showing what they can do on their own account. If they fail, there is none to help. If, by dint of industrious experimentation and much floundering, they succeed, well and good. In either case, however, the pupils are innocent sufferers to greater or less degree. There are other schools, usually the larger ones, which are not willing to take these young graduates, but are ever on the watch to discover and attract the more successful ones from the smaller schools. Colleges complain because the pupils from the high school are not well trained. The high schools reply that they have been taught by the teachers sent to them with the strongest college recommendations. It seems not to have occurred to either party that a better means of solving their respective difficulties, which are very real on both

sides, would be to unite in a coöperative effort for the theoretical and practical training of teachers under competent supervision before they are thrown out to sink or swim alone. Many a teacher, who now fails wholly or in part, could be saved to the ranks of really good teachers if he received proper assistance from the principal at the start. If the beginner could commence his work, not only with this assistance from the principal, but also with careful criticism and supervision of his work by a university department of education, the chances of his attaining a much higher degree of success would be immeasurably increased. Where there is opportunity for such coöperative effort on the part of the university departments of education and local high schools, the latter could render an inestimable benefit to the cause of high school education by providing an opportunity for a certain amount of teaching by candidates under the close supervision of those who are competent to assist them in successful practical efforts based upon well-considered theory. The experience of Germany in this matter should not be permitted to escape our notice without the most careful consideration. Tentative experiments along this line in a few American high schools seem to be meeting with such success as to warrant their extension to other institutions.

CHAPTER X

A DESIRABLE STANDARD OF TRAINING

WE have thus far spoken of the need of a higher standard of qualifications for our high school teachers without special reference to what that standard should be. What should it be? What are the qualifications which it is right and reasonable to expect such teachers to possess?

- First, of course, a certain native ability and adaptability. These are fundamental, but it is not the business of the state or the institution to create them. It is their business to discover them where they exist and then to train them to the greatest practicable efficiency. Only less important is it that those who do not possess these qualities should be kept out of the work of teaching and guided into a field in which they can be more successful. For the state and the institution, the training is the important factor in this question. Of what should it consist?

The Report of the Committee of Seventeen. — An answer to this question has already been formulated in the Report of the Committee of Seventeen, a committee appointed by the National Educational Association. As

the most authoritative expression of opinion on the subject this report may be taken as the point of departure for the discussion of the question.

The following are the joint recommendations of the Committee of Seventeen on the professional preparation of high school teachers.

"The committee on the preparation of high school teachers recommend:—

"I. That the academic preparation include the following elements:—

"A. A detailed and specialized study of the subjects to be taught. The program of studies selected by each student should include work in subjects outside of those in which he is making special preparation, sufficient to give some insight into the different fields of knowledge and to avoid the dangers of over-specialization.

"B. One or more subjects from a group including history, economics, and sociology, which will give the teacher a proper outlook upon the social aspects of education.

"C. A course in general psychology and at least one from a group of subjects including history of philosophy, logic, and ethics, which will give the teacher a proper outlook upon education as the development of the individual.

"II. That definite study be given to each of the following subjects, either in separate courses or in such combinations as convenience or necessity demands:—

"A. History of education.

1. History of general education.

2. History of secondary education.

- “B. Educational psychology with emphasis on adolescence.
- “C. The principles of education, including the study of educational aims, values, and processes. Courses in general method are included under this heading.
- “D. Special methods in the secondary school subjects that the student expects to teach.
- “E. Organization and management of schools and school systems.
- “F. School hygiene.

“III. That opportunity for observation and practice teaching with secondary pupils be given.

“The committee recognizes the difficulties involved in this recommendation, but believes that they are not insurmountable. Each of the following plans has proved successful in some instances:—

- “A. The maintenance of a school of secondary school grade that may be used for observation and practice.
- “B. Affiliation with public or private high schools so situated geographically that practice teaching can be done without interfering with other work of the college course.

“In addition to the above, the committee suggests that where competent critical supervision is possible, cadet teaching, in schools more remotely situated, may be attempted. In such cases, a teacher's diploma might be granted after a year's successful work as a cadet teacher.

“IV. That the minimum requirements for a secondary school teacher be graduation from a college maintaining a four-year course and requiring four years' high school work for admission, or from an institution having equivalent requirements for admission and giving equivalent academic scholarship.

"A year of graduate work divided between academic and professional subjects is desirable. Discussions of the relative value of college and normal schools for secondary school teachers are to be found in the references below. (See p. 538 of Proceedings of the National Educational Association.)

"V. That the study of subjects mentioned under II be distributed through the last two years of the college course.

"The proportional amount of time given to these subjects will vary with local conditions, but an irreducible minimum is one eighth of the college course. They should be preceded or accompanied by the subjects mentioned in I, B, C. Recommendations as to the amount of time given to particular courses will be found in several of the accompanying papers."¹

In the training of the high school teacher there are four factors to be considered: (1) The length of the training period; (2) general academic training; (3) theoretical professional training; (4) practical professional training. The five headings in the Committee's report may be reduced to three. Points I and IV belong under general academic training; points II and V, under theoretical professional training; and point III, under practical professional training.

The Period of Training. — Extended observations of the work of high school teachers has led the writer to believe that the minimum satisfactory standard of general academic training should be the equivalent of that

¹ Proceedings of the National Educational Association, 1907, pp. 521-668. Also published separately.

required for graduation from the four-year college course, together with one additional year of combined theoretical and practical professional study. An examination of the Prussian system in operation has served to confirm the belief. The first reason for this conviction is general in its nature. It lies in the fact that the work of the high school teacher is just as important for the welfare of the individual and of the state as the work of the physician or the lawyer; it requires ability of equally high grade, and he should have just as good talent and training. In the attempts to establish a satisfactory standard of training for the lawyer and physician, no one thinks of less than five years of training from the time the candidate enters college. The shortest of combined courses provides for this time, and many young men actually spend three or four years in the professional school after the four years of college life. The young physician often adds one or two years of hospital experience. The work of the high school teacher should be put upon such a basis that it will rank with that of the learned professions and be entitled to the respect of those who practice them.

A second and more fundamental reason lies in the fact that the work of the high school teacher requires all the general culture, personal power, and professional facility that such a course of training can give. In the school and in the community he stands legitimately as the representative of general literary and scientific culture.

He should not dishonor the spirit which he represents. He should not only have a scholarly acquaintance with the subjects that he teaches, but he should have such knowledge of other subjects as will give him a broad outlook upon life and the whole field of human effort. In scarcely any other vocation is there such an opportunity for the exercise of great permanent influence through purely personal power. He should have time and opportunity for the training and development of that power. The body of purely professional information which every teacher should have before entering upon his work is of such amount and character as may well occupy part of his thought for two or three years. It cannot be swallowed whole with profit, it must be chewed and assimilated. The candidate needs, in addition, time and opportunity for serving a carefully supervised apprenticeship before he assumes the burdens of an entire school on his own account. It is to be regretted that the Committee of Seventeen did not see its way clear to speak as positively regarding the need of the graduate year as it did concerning the regular college course.

Academic Training. — The range of subjects to be pursued in the general academic training cannot be definitely prescribed, but there are certain principles of general application. These principles have been recognized in the report of the committee, but it is worth while to state them a little more explicitly than they are

there given. In the college the candidate should study thoroughly and somewhat extensively two or three allied subjects which he desires to teach in the school. No exact statement concerning the amount of time to be devoted to these subjects can be given, but it may be said, in general, that each subject should be pursued in the college course from two to four years beyond the point where the teaching of it stops in the high school. By choosing three different but allied subjects, the candidate will secure, to the greatest possible degree, the advantages of both specialization and general study. Such training also prepares the teacher to do better work in the school than if he devoted himself exclusively to a single subject. If he is properly trained, he can teach two or three subjects more profitably than one. The pursuit of the favorite subjects should not be permitted to engross so much time as to exclude a reasonable number of other courses necessary for general culture. Especially should English not be neglected. The social studies are particularly important because of the insight which they give into the sphere of the school as an institution; the high school teacher should be an intelligent factor in the working out of our numerous unsolved social problems. Psychology and the philosophical studies are to be commended, for the reasons given in the report. At least one elementary course in biology either in the preparatory course or in the college should be included.

Theoretical Professional Training.—The recommendations of the committee concerning the theoretical professional training, as given under II and V, impress the writer as being the most satisfactory part of the report. The essential elements of that training are there indicated. The amount of time to be devoted to these subjects together and to each separately is necessarily an uncertain and somewhat variable quantity. Other topics might be added, but a satisfactory study of those suggested would suffice. It is probably well that the study of these subjects should be begun in the third year of the college course; it is certainly desirable that they should be continued through the fourth and the graduate year. The work of the graduate year should be almost, if not entirely, professional, and this fact might reduce the amount of theoretical professional work taken in the third and fourth years.

Practical Professional Training.—The recommendation of the committee concerning the practical training, as given under III, might well be more positive and definite. Not only should "opportunity for observation and practice teaching with secondary pupils be given," but such work should be required, and that, too, under careful, competent supervision. It is the opinion of the writer that the general academic training and the theoretical professional training, especially the latter, are now in a fair way to take care of themselves in any

plan for adequate training that may be formulated; and that not only the most difficult, but also the most essential point yet to be developed is just this matter of actual teaching or what we have called practical professional training. That this opinion is shared by others is indicated by the following:—

"I shall assume without further argument that adequate professional instruction of teachers is not exclusively theoretical, but involves a certain amount of practical work."¹

"In the professional preparation of the teacher practice is not in the least intended to supplant theory, but merely to supplement it, to vitalize it, to render it useful, and to give the student some training in applying it. . . . We have tried to teach students to swim by a thorough drill in the principles of buoyancy and aquatics, but we have refused to give them even a swimming pool where they might try to see if they could prove the worth of these principles, or even where they could see other swimmers at work. The crying need to-day in our university departments of education is for these 'swimming pools.'"²

The candidate should have an opportunity, under proper leadership, to observe, during his senior year, both the general management of the school and actual teaching of the subjects in which he is most interested; he should have, during his graduate or professional year, an oppor-

¹ Dewey, Relation of Theory to Practice. Third Year Book of the National Society for the Scientific Study of Education. Part I, p. 9.

² Farrington, Observation and Practice Teaching in College and University Departments of Education. Papers of the National Society of College Teachers of Education, February, 1909.

tunity both to observe such teaching and himself to teach regularly at least one of these subjects under close and competent supervision. How can such a course of training as we have outlined be provided? An answer to this question is attempted in the following chapter.

CHAPTER XI

A PLAN FOR PROVIDING THE DESIRED TRAINING

ANY satisfactory plan for the training of teachers for the secondary schools must make provision for the general academic training, the theoretical professional training, and the practical professional training discussed in the preceding chapter. The outline of such a plan is here given, along with its apparent advantages and disadvantages.

General Academic Training. — With the academic training there need be no difficulty. This is the one part of the scheme which the colleges and universities have always carried out with more or less effectiveness. It is only within the last two decades that anything more than the general college course was thought necessary. This course can be rendered much more profitable to the student, however, if he is wisely advised regarding it. College students are often ignorant of the conditions prevailing in the high schools and of the principles underlying the best arrangement of their work in preparation for future service as teachers ; and, unfortunately, the members of many college faculties are scarcely better informed.

The result is that the student often chooses his college work without due regard for the requirements of the calling upon which he desires to enter. He should be advised to prepare himself for the teaching of at least two allied subjects; first, because a teacher is likely to do better work, in the long run, if he teaches more than one subject, and second, because the practical needs of the schools, especially the smaller ones, often require that one person shall teach several different subjects. He should be advised that some combinations of subjects are better than others, and that, in addition to his specialties, he should take such other subjects as will give him a broad outlook upon the whole field of human culture and attainment. Through wise advice these ends can be accomplished without any undue professionalizing of the general academic course. The student should be able to make this part of his preparation in any good college.

The Theoretical Professional Training presents more difficulties. The spirit of competition, added to a growing appreciation of the importance of the work, has led many higher institutions to introduce chairs of education or to offer courses in education which are given by a member of some other department. In too many cases these instructors have had no special training for their work. In some instances they have no particular interest in it, and they undertake it only because it is thrust upon them. Under such circumstances it is not surprising that the

work is unsatisfactory and that it fails to command the respect either of students or of other members of the faculty. Under similar conditions the same thing would be true of any other subject in the curriculum. Where such conditions exist, it is, of course, hopeless to expect that the theoretical professional training will be satisfactory. The fact that they do exist in many institutions need not be taken as particularly discouraging. With such rapid development as the subject of education has had within the last decade, it is inevitable that there should be a lack of well-trained instructors. Sooner or later there will be improvement in the quality — possibly also a decrease in the number — of courses offered. Wherever an institution, large or small, takes proper pains to secure competent instructors in the department of education, there is no reason why instruction in this subject may not be as satisfactory as that in any other, or why it may not be given in any good college or university.

The Practical Part of the Professional Training is not so easily arranged, but it is absolutely necessary, and a way to provide it must be found. In the first place, there should be opportunity in the senior year for a considerable amount of observation under the careful personal direction of the professor of pedagogy or some one appointed by him. The general principles of school and class management should be considered as well as the methods of

teaching particular subjects. Students might profitably spend several days or parts of days in some secondary school as the active assistant of the teacher in charge. It is important that the school in which observations are made should be as good as it is possible to provide. The observation work should be systematically directed by the professor in charge, and the result of it should be considerable acquaintance, on the part of the student, with the general conditions and needs of the school and with the methods of teaching the subjects in which he is interested. In American institutions this phase of the training work has not received the emphasis that it deserves. It is vitally important.

In the second place, opportunity must be provided for actual teaching by the candidate. We have seen that in Prussia the general academic training and part of the theoretical professional training are given by the university, while the remainder of the theoretical professional training and all of the practical professional training are given in the gymnasial seminar, which is entirely separate from the university. Although we cannot adopt the German plan as a whole, there are certain elements of it which are adaptable to our use. Both the observation of good teaching and an occasional hour of practice teaching, as they are provided in many university departments of education, are valuable, but they are insufficient. The candidate needs real teaching in a real

school under close and competent supervision. Under existing circumstances the high school cannot of itself undertake the training of its own teachers, but why should it not coöperate with the university in doing it? The closer the connection between the university department of education and the high school, the better it will be for all parties concerned. The theoretical work of the department of education would be steadied and rendered more practical if it were every day in touch with the actual work of the school; and, on the other hand, the school would be stimulated by having its work daily subjected to the criticism of those who are making a sympathetic study of the theory of education. The following plan is proposed:—

Coöperation of College and School.—Let the university department of education and the schools, especially the public high schools, combine their efforts in providing opportunities for the practical training of high school teachers. The candidate will come to the close of the four-year college course with good academic training and with theoretical professional training that should include at least elementary courses in the history of education, educational psychology, the principles of education, secondary education, and considerable wisely directed work in observation. In consequence of this training he will be better prepared for teaching than are a majority of the teachers now at work in the high schools. Let him be

given a position as candidate teacher in some high school, with not to exceed ten hours of teaching and a proportional amount of responsibility in the general duties of the school. With reference to these general duties, let him be responsible to the principal of the school, just as is any other teacher. Let him be known to the pupils and to his colleagues as a teacher with full authority and responsibility as far as his service goes. In general matters let the principal give to him such special care and oversight as he would naturally give to any new and inexperienced teacher; but in his classroom teaching let him be under the supervision of an expert and experienced teacher of the subject, who shall be a member both of the university department of education and of the school faculty. This supervisory instructor should criticize the lesson plans and the teaching of the candidate, show the relation of principles to practice, give demonstrations of his own way of teaching, and assist the candidate in every way possible. The practical work of the candidate will occupy approximately one third of his time, but it should be emphasized as the center around which all the other work of the year is to be gathered. Instead of being an incidental exercise, as are occasional hours of practice teaching, it becomes the serious work of the year.

The professional studies which the candidate will pursue along with his teaching will include observation of the work of other classes, especially in the subjects in which

he is interested ; methods of teaching his subjects ; school organization and administration ; and such other subjects as he may choose. At least two thirds of his time will be devoted to professional rather than purely academic work.

The Professor of Education.—In the management of the practical training of the candidate, three instructors will be concerned : the professor of education, the high school principal, and the supervising instructor. It will be necessary for them to work in harmonious coöperation. As the responsible director of the department work, the professor of education must know intimately the students in his department and must be responsible for their admission to the practical work ; he must keep in close touch with the practical work which each candidate is doing ; he must have the veto power in matters which seem to him to concern the success of his department ; and he must have authority in the selection of the supervising instructors. He must be able to keep a firm hold on large essentials and at the same time to give a free hand to his colleagues in the details of their work. Since the welfare of the school and the welfare of particular university departments as well as that of his own department must be conserved, there will be abundant opportunity for the exercise of tact and good management.

The high school principal (or, in small schools, the superintendent) would have, under ordinary conditions,

a relatively small but a very important part in the work. As the responsible director of the high school he should have, with the approval of the managing board, a voice in the admission of candidates to his school; he should have the authority to require their withdrawal in case their work is of such character as to injure the school; he should have a hand in the general arrangement of the candidates' work in the school; he should have authority over the candidates just as over his regular teachers during the hours of their service; and he should be responsible for such assistance as he can render them during these times. If circumstances permit, he might himself serve as supervising instructor, but he would not usually be able to do this on account of the multitude of duties connected with his office. Perhaps the most serious criticism that can be passed upon the work of the Prussian gymnasial seminar is that the director, who is also principal of the school, does not have enough time to devote to it. We should avoid this difficulty and should call upon the principal for such service only as can be rendered in a more or less incidental way. If he has faith in the plan and tact in its execution, he can render valuable assistance without adding greatly to his own burdens.

The supervising teacher is the new factor in the scheme. He must be one whose scholarship commands the confidence of his colleagues in the university, whose teaching ability commands the confidence of both teachers and

pupils in the high school, and whose personality is pleasing to all. It is immaterial whether he is primarily a member of the university faculty or of the high school corps. There are few enough qualified persons to be found in either place at present, and securing them would necessitate selection and training. The necessary combination of pedagogic and academic interest and training is found none too often, but a recognition of the need would produce the type of instructor required for this work. There should be such an instructor for each of the main groups of subjects taught in the high school. Probably the best results would be obtained if part of these instructors belonged to the high school corps and part to the university faculty. Their teaching in the high school might be used for the observation work required of all candidates in the senior college year, in which case the pedagogical service rendered would be more or less incidental, but it would be none the less effective. The actual teaching of subject matter in the high school and in the university would have to be done by some one else if it were not done by them. Therefore, the only expense would be the cost of the purely supervisory work which they would do, and the paying of a larger salary to an instructor of this type than would be needed for the ordinary instructor. These men would be, in the best sense of the term, teachers of teachers, and the utmost care should be used in selecting them.

The foregoing scheme is proposed as a simple, practical plan for the adequate training of high school teachers. It does not contemplate the training of administrative leaders. Many college departments of education or schools of education will desire to offer more courses than the minimum number indicated as necessary; and many students, especially those who are preparing themselves for administrative work, will desire to take these additional courses. On the other hand, there are many institutions that will gladly provide for such work as may be necessary for the training of high school teachers, but they do not wish to develop a complete professional school for the training of leaders. In a small college two members of the department of education and six supervising instructors could carry the theoretical work of the department, and care for a dozen teaching candidates. If one half of the standard colleges and universities of the country should turn out annually an average of five teachers trained according to the above plan, the effect upon high school teaching would soon be felt. Of course many institutions could provide opportunities for a much larger number.

State Supervision. — The plan proposed is immediately adaptable to any good college or university and any adjacent secondary school of high grade that are willing to coöperate seriously and intelligently in the work of training high school teachers; but its complete development

will not be effected until the state establishes adequate standards of certification and then assumes supervisory control of the institutions in which teachers receive their professional training. Legal standards of certification are probably a necessary preliminary to the general adoption of so extensive a plan for the training of teachers. Until such legislation is enacted the state will have no occasion to supervise the coöperative work of schools and colleges, and all that is done before that time will be voluntary, and consequently optional in character. But when the state establishes a standard of training and pays money to secure it, there must, of course, be state supervision, and it should be exercised over all the institutions that attempt to do the work. State institutions would probably have certain advantages, due to the fact that they are part of the public educational system, but there seems to be no sufficient reason why private colleges and schools might not do the work successfully under state supervision. The assistance of all available colleges, universities, and schools is needed. State supervision is now being exercised in California, Indiana (for the elementary schools), and New York.

The State Examination.—There remains the question, whether in addition to the five years of training which the candidate receives, there should be required of him a final state examination such as is required of the German candidate. Far more important than any examination is

the training itself, and if it were well done, with due regard to the elimination of unsuitable candidates, as well as to the promotion of those who are capable, the examination might be omitted. For the present, at least, it may be regarded as unnecessary for those who have taken, under state supervision, such a course of training as has been indicated. Whether the increased stimulus and safety, which a dignified, serious examination affords, will in the future be regarded as desirable, may be left an open question until there is a greater abundance of adequately trained teachers than exists at present. Apart from the question of feasibility under existing circumstances, the logic of the situation seems to require it for teachers, no less than for lawyers and physicians. It will not soon be possible in the United States, however, to require absolutely of all candidates such a course of training as has been suggested. For those who have not had such training, but who are nevertheless capable of successful teaching in the secondary schools, the examination should remain as a means of showing equivalent culture and ability.

The Life Certificate. — It is doubtful whether a life certificate should ever be issued by the state until the candidate has had a successful teaching experience of at least two years including the year of practical professional training. It is only reasonable, however, that when he has honorably fulfilled adequate professional require-

ments, he should receive the legal recognition that is due a professional man, in the form of a life certificate to teach in the public high schools. In case the holder does not teach for a series of years, recognition of the validity of the certificate might reasonably be made optional with school authorities.

Summary. — The essentials of the plan which has been proposed for the training and certification of high school teachers may be summarized as follows: —

1. A five-year course of combined academic and professional training following the completion of a good four-year preparatory course.
2. Such study of two or three subjects as will give the candidate scholarship sufficient to teach them effectively in the high school.
3. Such study of other subjects as will give him a broad outlook upon other departments of scholarship and upon life.
4. At least an elementary study, during the third and fourth years of the college course, of the history of education, educational psychology, principles of education, secondary education, and observation of actual teaching.
5. One year of graduate study (which might well be called the professional year), in which he shall divide his time between actual teaching under careful supervision and additional theoretical professional study, the former to be regarded as fundamentally important.

6. For the satisfactory completion of such a course of training the university should give a special professional teacher's certificate; and when the work is properly organized under state authority and supervision, the state should give a professional life certificate to teach in the high school.

Advantages of the Plan.—1. First should be mentioned its effectiveness from the pedagogical point of view. The plan combines the strongest elements of the present American system—academic and theoretical professional instruction by university professors, with the strongest element of the Prussian system—cadet teaching in a real school under normal conditions, carefully supervised by expert teachers and administrators. The candidate has reached the stage in his development when he should be more interested in the practical than in the theoretical side of the vocation, and this year of combined effort will serve to bridge the gap between theory and practice. He has sufficient maturity and training to enable him to assume a critical attitude towards his own efforts and to profit greatly by observing the work of others and by having their criticism of his own work. The practical work and the theoretical studies will each be illuminated by the other, and the candidate will have time and opportunity to see their mutual relationship in a way that will prove helpful in his whole subsequent career. The close relating of the theoretical and the

practical will remove the ground for the more or less justified criticism that theoretical pedagogy is of little value because it is so far removed from practice. Finally, the excellent result of this combination of theory and practice in those individual cases in which it has been made as a matter of necessity seems to be empirical proof of the value of the plan.

2. The plan is adaptable to any community where there is a college or university and a secondary school which are prepared to coöperate heartily in a serious effort to provide proper training for future secondary school teachers. Beyond a certain minimum limit the success of the enterprise would not depend upon the size of the institutions, though there would be manifest advantages where the coöperating high schools were abundant. A private secondary school might coöperate as effectively as a public high school, but the training received there would reflect the spirit of the private school rather than that of the high school. In most schools, unfortunately, there is such a change of teachers each year that candidates could be admitted without unduly disturbing the stability of the school. There seems no good reason why a school might not definitely arrange to use a specified number of candidates each year.

3. It involves no great financial outlay. Buildings and other material equipment already exist. No new teachers would be needed, for the additional supervisory duties

performed by the high school principal and the supervising instructor would be more than offset by the services rendered by the candidates. Possible sources of increased expense would be as follows: (a) It would probably be necessary to pay the supervising instructor a higher salary than would be paid to the teacher who did his work under the usual conditions. (b) It might be necessary to pay the school a bonus for its share in the enterprise. The state could well afford to meet such expense if it were found to be necessary. (c) It might be necessary, for a time at least, to pay the candidates for their service. This should be done, but the necessity of doing it would depend upon the number of applicants for this sort of training. In any case the total expense for all purposes need not be great.

4. The stimulating effect of this teaching under criticism would be helpful in all the work of the high school. Every teacher would be subject to visitation and criticism. He would be compelled by force of circumstances to keep in touch with pedagogical thought regarding the subjects that he teaches, and if he is a true teacher, he would take delight in making each day's work as good as possible. The experience of a few schools where the plan has been tried indicates so great improvement in the spirit and attainments of the school that even the parents have recognized it and have approved the plan.

5. The steadyng effect of daily contact with the practical needs of the school would strengthen the work of the university department of education. It cannot be justly claimed that all the legitimate work of this department should be tested by the rule of practice, but it should show considerate regard for actual needs and conditions.

6. A real school of high grade is the best possible place in which a candidate can receive his practical professional training. It is far better than any mere practice school which is conducted more for the purpose of training teachers than training pupils.

"For the training of the average teacher the regular secondary schools are far better [than special practice or experimental schools belonging to the university], since they provide experience under normal conditions, and the amount of practice teaching would not be enough to interfere with the character of the instruction and the organization of the school. Training in experimental schools is apt to be abnormal and not to give either the character or the quantity of the experience needed by the pupil teachers. In a state system of schools which includes the university, there should be no objection to such an arrangement. With private colleges it would be somewhat different, but could probably be arranged."¹

7. The high schools would have a good opportunity to recruit their own regular teaching force from the ranks of the candidates with whose qualifications they are

¹ Monroe, Paul, "The Organization of the Department of Education in Relation to the Other Departments in Colleges and Universities," *Journal of Pedagogy*, Vol. XIX, p. 124.

already well acquainted. This would doubtless be less uncertain, and consequently more satisfactory, than choosing teachers of longer experience with whom they were not so well acquainted.

Objections to the Plan. — 1. The successful execution of the plan would require an amount of coöperation between university authorities on the one hand and school authorities on the other, that it might be difficult to secure. Without such coöperation the plan would certainly fail. There would be required on the part of those concerned a clear appreciation of the need of training teachers, faith in the plan proposed, mutual personal confidence and consideration, and enough tact to avoid impossible situations.

2. Perhaps the greatest menace to the success of the plan lies in the fact that it would doubtless be used by institutions which are not qualified to do the work thoroughly, and thus the scheme might be brought into ill repute. The plan is so adaptable that, were it once taken up by a few institutions which are well equipped to carry it through successfully, it would soon be adopted by other institutions whose equipment and standards are inferior. This difficulty could be met only by proper state supervision of the scheme, in some such way as prevails now in the province of Ontario, Canada. Toronto University and Queens University are authorized to carry on the work of training high school teachers under condi-

tions definitely prescribed by the Government, and when the work is done, Government recognition is given.

3. Since the plan contemplates the use of those colleges and secondary schools only which are located near enough together to make speedy intercommunication easy, not enough teachers could be trained in them. To this objection it may be replied that if the plan were adopted by all those institutions which can meet these conditions perfectly, it would mark a great improvement over the existing situation. It is possible also that, with experience, it might be extended and modified so as to include some schools located at considerable distance from the college. The candidate might teach in such a school during one semester, carrying on at the same time a certain amount of university work *in absentia*, and return to the university for the other semester. Work of this kind is now being done by Harvard University and by the University of Wisconsin.

4. It might be impossible to provide opportunities for cadet teaching for all who desired to undertake it, and consequently a painful process of selection would be necessary. Such circumstances sometimes arise in connection with other subjects, however, and the most competent are admitted to the desired course. That it might work real hardship in some cases may be granted without in any way condemning the ultimate wisdom of the procedure. One of the greatest benefits to be derived from the proper

training of teachers would come from the winnowing out of those who, for sufficient reason, are not adapted for the work, and the sooner it comes the better for all parties concerned.

5. Enough competent supervising instructors are not available either among high school teachers or among the members of university faculties. A very real difficulty, but the demand would create the supply. The position would establish a new and desirable rank among high school teachers, and it would open a new field for the efforts of university instructors.

6. Parents would object to having their children practiced upon by inexperienced teachers. Another real difficulty, but not so serious as it is often thought to be. In many schools, especially the smaller ones, the children are taught by inexperienced teachers who have had no professional training, who are heavily loaded with teaching, and whose work receives no criticism from a more experienced colleague. These teachers are "practicing" quite as much as the candidates whom we are considering, and they are doing it under conditions far less favorable to themselves or to their pupils. When it is remembered that, under the plan proposed, the candidates are teaching every lesson under the sympathetic, critical supervision of an experienced teacher of the subject, who has been chosen for this supervision just because he is a superior teacher, the probability of unsatisfactory teach-

ing is reduced to a minimum. If the training system did not exist in the school, the superior teacher would, in many cases, not be there, and pupils would never have the advantage of his skill. With such an explanation of the situation the objections of parents can usually be met. But even in those cases where they persist, the manifest advantage to the schools as a whole is so great that the inconsiderate objections of parents may well be overruled.

7. The presence of inexperienced candidates in the school is a disturbing factor because of the constant uncertainty concerning the success of their efforts. If their work is properly supervised, this need not be a serious matter, and, as in the case of the previous objection, the advantage to the schools as a whole is so great that it more than compensates for any temporary disturbance.

8. It is not easy to adjust the working hours of candidates and supervising instructors so that both the university work and the high school work can be properly done. This is an administrative difficulty which could not, in every case, be easily adjusted, but it would probably not prove to be a serious matter.

The University Training School. — No mention has thus far been made of the place of the distinctive university training school in the scheme that has been proposed. The advantages of such a school are that it is entirely under the control of the department of education; it is

conveniently located; it can be used for purposes of experimentation; and its work can be arranged with reference to the needs of the department of education. It can be used for a limited amount of cadet teaching in the same way as the high school. All things considered, it is a distinct advantage to the work to have such a school. As it is likely not to be large, however, it is more valuable for purposes of observation than for cadet teaching. In the former sphere it should be extremely helpful. But it alone is not sufficient for the satisfactory practical training of teachers; it lacks some advantages in comparison with the regular public high school; and it is not absolutely necessary where coöperative arrangements can be made with a local secondary school.

CHAPTER XII

CONCLUSION

THE American people have great faith in the value of education, and they are willing to pay liberally for the support of their schools. There is yet lacking, however, adequate appreciation of the fact that the worth of a school is determined more by the efficiency of the teacher than by all other factors combined, and that the work of the high school teacher is serious business, requiring for its successful performance not only good native ability, but thorough training also. Germany and several other European nations (see Appendix) have acted more wisely than our own country in this matter. They have recognized the strategic importance of the work in the secondary schools; they have fixed high standards of qualifications for their teachers; they have provided the best means that they could devise for the training of these teachers; and they have deliberately made the position of teacher in the higher schools so attractive financially and socially that men of high character and ability have been drawn into it. For these nations it means the perpetuation of the best in their aristocracy. It is quite

time that we should take more seriously what is really an important factor in the welfare of our American democracy and adopt adequate measures for the training and support of the teachers in our secondary schools.

Even if such a course of training as we have outlined were now offered by the colleges and universities, it is probable that no great number of candidates for the teacher's office would pursue it to the end until the legal requirements for certification are higher than they now are; but it is to be hoped that enough would take it to test the practicability of the plan and the value of the training given. If the colleges and universities of the country would express their conviction of the need of some such standard of qualifications for high school teachers as has been indicated in the foregoing discussion, and would then, to the limit of their ability, support their convictions by the establishment of departments of education that would provide opportunities for such training, they would give to the ambitious individual an opportunity to secure the desired training, and they would place themselves in position to join hands with high school officials, and school authorities generally, in urging the state to adopt a satisfactory professional standard for the training and certification of high school teachers.

In the light of the sentiment and conditions existing in most of the states at the present time the standard proposed must, of course, be regarded by the practical person

as ideal and not to be attained at once. Some of the steps by which it will be reached are indicated in the various standards now existing in the different states for the training and certification of high school teachers. In many of the states the first step towards the establishment of a special high school certificate has not been taken. California, on the other hand, has practically reached the standard proposed, and a few other states are approaching it. The experience of other nations and a rational view of our own needs testify that this standard is the lowest that should be accepted when the time shall be ripe for the establishment of a professional standard, and that all temporary legislation should look forward to this end. It is probably not too high for early adoption in some states, and it is certainly not too high to be adopted by those colleges and universities which believe in the establishment of a truly professional standard of preparation for high school teachers and which desire to be leaders in providing the needed training. Development is certain to be slow, but it is incumbent upon individuals, educational institutions, and the state to make sure that it is not slower than it ought to be. In state certification California leads the way. In institutional activity Brown University and the Providence high schools are making an enviable record. Let us hope that other states and other institutions will speedily follow their example.

APPENDIX



APPENDIX

THE TRAINING OF TEACHERS FOR SECONDARY SCHOOLS IN OTHER COUNTRIES

Austria. — The provisions for the training of secondary school teachers and the conditions under which they work are much the same as those prevailing in Germany. A few points of difference may be mentioned. The candidate must have spent at least seven semesters in the university before he is permitted to apply for the state examination. Only one year of practical training is required, but two are permitted and encouraged. This period is called the *Probeyahr*, or in the second case, the extended *Probeyahr*. Formal seminar meetings are not required as in Prussia, but, under the direction of an experienced teacher to whom he has been assigned for guidance, the candidate visits classes, gives instruction, and engages in frequent conferences with his superiors concerning his work. A long written report is not required, but only "written notes (*Elaborate*) according to circumstances." The certificate given to the candidate at the close of the *Probeyahr* must be signed by the professors and class teachers to whose supervision he was assigned as well as by the director of the school.

Finland requires graduation from the university, and if a candidate expects to attain a position in the highest rank,

he must have won the highest honors in his university career. He will have some advantages if he attains the doctor's degree also. Following the university course he must spend a year in practical training at one of the Normal Lyceums or secondary schools, where he observes, teaches, listens to lectures by a university professor, and is engaged in frequent conferences concerning his work. At the close of the year of training he must pass an examination in pedagogic theory, and either then or later, an examination in practical work. Great importance is attached to the latter.

Sweden. — A teacher in the secondary schools must be a graduate of a university ; he must have made special preparation in the three subjects that he expects to teach ; and he must spend one year after graduation in a higher school, observing and teaching in all the classes of the school in turn. In order to obtain the highest positions, he must have taken the doctor's degree. In the year of practical training he is under the supervision of teachers to whose guidance he has been assigned. "Proof" lessons are followed by criticism, as in the Prussian seminar. Lectures on the theory of education are sometimes given by a university instructor, but they need not have any particular connection with the practical work. The emphasis is placed upon scholarship in the subjects to be taught and upon practical observation and experience in the schools.

Denmark requires a university course which demands five or six years for its completion, followed by six months of professional training. The candidate hears lectures on the theory of education and teaches in one of the great public

schools under the supervision of the director and the subject teachers to whom he is assigned. At the close of the period he must pass an examination in both theory and practice. In the practical examination the examining commission observe his instruction during two hours of teaching in each subject. He must be prepared in one principal subject and two related subjects.

Norway has requirements which are very similar to those of Denmark.

France.—The minimum scholastic requirement for teachers in the secondary schools of France is the attainment of the *licence*, which is secured after two or three years of university study following the completion of the secondary school course, and which corresponds in general to the American A.B. degree. There are two kinds of secondary schools, the *collège* and the *lycée*. The latter is of higher rank than the former, although the certificate from either admits to the university. There are three grades of instructors in these schools, based upon scholastic qualifications, experience, and teaching ability. The highest rank is that of professor (*professeur agrégé*), and it is held by those who, besides having a *licence*, have passed successfully a very severe competitive examination (*agrégation*). It requires at least two years of work after a man has received the *licence* before he is prepared to enter for this examination. Competition is open to all, regardless of age or position, and many succeed late in life. Those who pass this examination successfully have the rank of professor, and they have a legal *right* to what is practically a life position as teacher in a *lycée*. The minister of education is

under obligations to find such a place for them. The number of successful applicants is limited to the number of men for whom positions of this kind are available, hence the standard prevailing in the examination is very high. The highest position that can be held by a teacher who has a *licence* only is that of professor in charge (*professeur chargé de cours*) in a *lycée*. There are also many less desirable positions of this kind in the *collèges*. Those holders of the *licence* who cannot secure positions of the second rank may yet find places as assistants (*répétiteurs, surveillants, or préparateurs*). Some of these ultimately secure promotion, others are unable to rise. In case of the absence of a professor an assistant is placed in charge of his classes.

A limited number of candidates for positions in the secondary schools receive special training in the higher normal school (*École Normale Supérieure*). By competitive examination about twenty persons are selected annually to whom scholarships are given along with admission to the normal school. All their expenses are paid while they are preparing, first for the *licence* and then for the *agrégation*. It requires at least five years to do this. Partial scholarships are given to some candidates. Of students who prepare for their examinations in the provincial universities no specified amount of pedagogical training is required, but students in the normal school are given work in both theoretical pedagogy and practice teaching. The latter consists of lessons (which are really lectures) given by the candidate before his colleagues, and of at least three weeks of work in the city *lycées* under the supervision of competent teachers. In the modern languages

practice teaching is extended to approximately two thirds of a year. There is at present a distinct tendency to emphasize the importance and to increase the amount of this work. In the training of teachers for the French secondary schools emphasis is placed upon accurate and thorough scholarship in the subjects to be taught.

England has depended more upon tradition and the demands of employers than upon legislation to secure the proper training of the teachers in the secondary schools. As a general rule these teachers are university graduates, but there are many exceptions. "A man can obtain work as soon as he leaves school, say at the age of eighteen; on leaving the university three or four years later he has no difficulty in securing quite a good post, especially if he is an athlete!"¹ There is no legal standard of preparation for secondary school teachers; in fact they are not required to be certificated at all. This state of affairs may be explained in part by the fact that until 1902 the secondary schools of England, including the great Public Schools, were practically all under private management. Attempts to maintain a secondary school teachers' Register under the authority of the Board of Education (the national authority in school affairs) have thus far failed; but the necessity of having one is generally recognized, and it seems likely that it will be established in the near future.

Since 1872 the Head Masters' Association has consistently urged the necessity of professional training for teachers in the

¹ Conditions of Service of Teachers, prepared by a committee of the Incorporated Association of Assistant Masters, p. 155.

secondary schools. Several universities took up the matter and provided opportunities for professional training either in connection with or following the university course. The colleges for women did much more than those for men. In 1905 the Board of Education provided in the Regulations for Secondary Schools that "when the Board think fit, they may, on consideration of the teaching staff as a whole, require that a certain proportion of all new appointments shall consist of persons who have gone through a course of training recognized by the Board for the purpose."¹ But until the enactment in 1908 of the following regulations for the Training of Teachers for the Secondary Schools² no provision was made by the Government for their professional training.

REGULATIONS FOR THE TRAINING OF TEACHERS FOR
SECONDARY SCHOOLS

Prefatory Memorandum

(1) The necessity of making some systematic provision for efficient courses of professional training for men and women intending to teach in Secondary Schools has been impressed on the Board by several considerations.

(2) In the first place, a large number of Secondary Schools have been called into existence under the Act of 1902, and a still larger number have come for the first time under the

¹ Regulations for Secondary Schools, 1909, Art. 15.

² Since the legal regulations concerning the training of secondary teachers in England and Scotland are of great interest as showing the recent rapid development of opinion in the subject and the tactful use of existing institutions in the gradual attainment of the desired end, these regulations are given at considerable length, and, for the most part, in official form.

cognizance of the Board by the operation of that Act. For the staffing of these schools the available sources of supply have not been adequate. Furthermore, the inspections made by the Board of Education have in many schools disclosed faults which systematic training would have done much to avoid; and it is hoped that so real a growth of opinion has taken place in favor of giving to teachers destined for Secondary Schools a technical preparation for their profession, that there may be some likelihood that the wider opportunities for training now provided will in future be utilized.

(3) In making the necessary regulations for the recognition of training institutions for Teachers in Secondary Schools the Board will regard all institutions, or departments of institutions, which comply with Articles 1-11 of these Regulations as being qualified for recognition for the purposes of Article 16 of the Regulations for Secondary Schools. This recognition will not imply more than that the institutions or departments of institutions so recognized are held to provide a satisfactory course of training for this purpose. The Board will be in the position to make Grants from the Exchequer to such Institutions only as impose no religious tests, either on students applying for admission or on the teaching staff or on the Governing Body.

(4) The Board are aware that a great deal of excellent training work is being carried on in a few specially organized Secondary Schools on lines which constitute the school the pivot of the training, and they are prepared to recognize, under suitable conditions, departments of such schools as Training Colleges for Secondary School teachers. This kind of organization is at present in its experimental stage, and in most cases involves the training of students in smaller groups than is usual in Training Colleges of the established type. In view of these facts and of the limited amount of money available for the purpose, the Board have been compelled to confine their grants to those cases of this kind in which a minimum of ten students can be effectively trained on those lines.

(5) The Board are not satisfied that all Training Colleges for Secondary School teachers have heretofore insisted on a sufficiently high level of general academical attainment as a condition of training. They are convinced that if a course of training is to be sound and effective, there must be no suspicion of indifference to the substantial knowledge which, after all, is the main outfit of the teacher. The Regulations accordingly provide that the course of training should be taken after graduation or its equivalent, and shall be confined to purely professional work.

(6) Although a teacher should never cease learning more of the subject or subjects he has to teach, — this is indeed a condition of good teaching, — yet at this stage and for the purpose here in view the student should be concerned rather with methods of instruction that have been found useful in the different parts of the school curriculum, with problems of discipline and school organization, and with the best ways of influencing young minds. This being so, the Board will require as an indispensable condition for the award of recognition or grant, that Colleges or Departments should have access under proper conditions to Secondary Schools which are thoroughly suitable for demonstration and practice. They desire to make it quite clear that however good the lectures given on the theory and history of education may be, they will attach the first importance to arrangements which will enable every student to see good teaching at close quarters, and to practice teaching under skilled criticism and for periods sufficiently long to admit of the acquisition of some real facility in instructing and handling classes, and in drawing up secondary school time tables and curricula. The Board are well aware that a year's training, however skillful, cannot insure the making of a good teacher; but they are satisfied that after a year's careful study and practice in teaching under supervision, in the way described, it should at least be possible for a teacher to undertake school work armed against the worst faults of inexperience and ignorance.

(7) Much depends upon the general competence of those who train the future teacher, and for that reason the Regulations require the staff of recognized institutions to be approved; but even more depends upon their direct experience in the special kind of teaching for which their students are preparing; and it is for this reason that the Board require that not less than one half of the staff shall themselves have been successful teachers for a reasonable time in Secondary Schools. There is, undoubtedly, a great deal that is common to the needs of all kinds of teachers; but the effective handling of the subjects and the pupils of different types of Secondary Schools must obviously call for familiarity with the special conditions of teaching peculiar to those schools, as distinguished from teaching in Elementary Schools on the one hand and from University teaching on the other.

(8) The manner in which the grants are to be calculated calls for some explanation. The Regulations provide that Grants will be paid to Colleges in which the number of Recognized Students is not less than ten at the rate of 100*l.* in respect of every complete group of five Recognized Students, subject to the condition that the Grant shall not exceed one half of the total sum which the Board are satisfied is paid for salaries on account of services rendered in respect of the work of the Secondary Training Department. By indicating in this way that the Grants are intended to promote the improvement of salaries and of teaching staff, and that they should be supplemented for this purpose by at least equal amounts derived from other sources, the Board desire to encourage the employment of adequate and thoroughly qualified teaching staffs. Thus it is hoped that improvement will follow in cases where it is most necessary, and that the effectiveness and prestige of the institutions will be increased. It is certain that, while the work of most of the Training Colleges for Secondary School teachers has been well done, yet they have often been unable to supply themselves with staffs of sufficiently high standing and experience to command general respect.

(9) The total Parliamentary Grant which has been made available from the Exchequer in aid of institutions for the training of teachers for Secondary Schools is strictly limited to 5000*l.* It must, therefore, be understood that if in any year the Grants, which will be payable at the rates provided for by the Regulations, should amount in all to more than that sum, it would be necessary for the Board in subsequent years to reduce those rates with a view to bringing the total sum payable within the prescribed limit.

CHAPTER I

General Conditions

1. In order to be recognized as a Training College under these Regulations an institution must be an institution or a department of an institution organized for the purpose of giving instruction in the principles and practice of teaching specially designed for persons who are preparing to become teachers in Secondary Schools as defined in the Regulations of the Board of Education for Secondary Schools.

2. The Training College course must be confined to purely professional instruction.

3. No institution can be recognized unless the Board are satisfied from time to time as to the following particulars: General management; adequacy, competence, and salaries of staff; courses of instruction and tests of proficiency; scale of fees; premises; equipment.

4. (a) Adequate provision must be made, in Secondary Schools approved by the Board for this purpose, for the instruction and practice of students in teaching and in school organization and management.

(b) If the Training College is a department of a Secondary School, this condition may be satisfied, provided the student has ample practical experience during the year of training in the school of which the College is a part.

5. (a) The principal or head of the Training College or department and not less than one half of the staff employed in the professional instruction and training of students in the Training College or department must have had, as members of the teaching staff, successful experience of the routine and practice of Secondary Schools for a reasonable period.

(b) At least one person, and as many more as the Board may from time to time consider necessary, must be designated as members of the staff of the Training College or Department for Secondary Training, and must give to their duties in this capacity a proportion of time adequate, in the opinion of the Board, for their proper discharge. In cases where the number of students in training reaches ten, the person or persons so designated must be engaged either exclusively or mainly in the supervision and direction of the work of students who are recognized by the Board as undergoing an approved Course of Training in accordance with these Regulations.

6. The course must extend over not less than a full academical year.

7. Not less than two thirds of the teaching practice must be taken in a Secondary School or Schools approved for this purpose by the Board. At least sixty school days must be spent in contact with class work, under proper supervision.

8. As a rule students must include in their course a special study of the teaching of one definite branch of the curriculum of a Secondary School.¹

9. (a) The selection of particular persons for admission to a Training College rests with the authorities of the College, but the Board will limit recognition for the purposes of these Regulations to persons qualified in accordance with the ensuing paragraphs of this Section.

(b) Until July 31, 1911, the Board will recognize as students in Training Colleges approved under these Regulations

¹ The special study of Modern Languages will not be considered adequate unless a period of study abroad has been passed, either before or during the period of training, under conditions approved by the Board.

persons who have obtained an approved degree conferred by some University of the United Kingdom, or who have obtained an approved degree conferred by some other University of recognized standing, or who have obtained one of the qualifications mentioned in Appendix B to these Regulations. [See page 308.]

(c) After August 1, 1911,¹ the Board will limit recognition for the purposes of these Regulations to students who have obtained an approved degree conferred by some University of the United Kingdom, or who have obtained an approved degree conferred by some other University of recognized standing, or who have obtained one of the qualifications mentioned in Appendix A to these Regulations. [See page 307.]

10. If persons other than students recognized by the Board under these Regulations are admitted to a Training College, the Board must be satisfied that the inclusion of such Students does not affect unfavorably the instruction and practice of the Recognized students.

11. The maximum number of students, whether recognized or not, who may be in training at any one time, will be fixed for each Training College by the Board after consideration of the premises, staff, equipment, and courses of the College, and the character of the provision made for the instruction of students in approved practicing and demonstration schools.²

No training College will be recognized which has fewer than three students in training.

12. Provided that the conditions set forth in Articles 1 to 11 of these Regulations are fulfilled, the Board may recognize an institution or department of an institution for the training

¹ It is intended in due course to limit recognition to persons who have taken an approved degree, or passed examinations equivalent to such qualification.

² The Board may hereafter require as a condition of eligibility for Grants that a Training College shall have at its disposal a satisfactorily equipped Secondary School to serve as a Demonstration School.

of teachers for Secondary Schools, as efficient, provided it applies for recognition, and whether it is eligible for the receipt of Grants under Chapter II of these Regulations, or not. Such institutions will on recognition be placed on the list of certified Training Colleges for Teachers for Secondary Schools which it is intended to issue.

CHAPTER II

Conditions for Payment of Grant

13. Grants will be paid annually by the Board to Training Colleges which comply with the conditions for recognition set forth in Chapter I of these Regulations, and also with the further conditions for payment of Grant set forth in this Chapter.

14. (a) The Training College must not be conducted for private profit, and must not be farmed out to the principal or to any other person.

(b) The Accounts of the Training College must be kept in the form prescribed by the Board, and must be annually presented to the Board after being duly audited by a qualified Public Accountant and Auditor.

15. The profession of a particular form of religious belief or attendance at religious worship must not be made a condition of the appointment or continuance in office of any member of the teaching staff or of the governing body of the Training College nor of the admission of any student to the Training College.

16. No student may be refused admission to the Training College except on reasonable grounds.

17. Grants will be paid to a Training College satisfying the conditions of this Chapter at the rate of 100*l.* in respect of every complete group of five Recognized Students who have completed an approved Course of Training during each year ending 31st July, subject to the following limitations: —

(a) The Grant paid to any College or Department on account of any year shall not exceed one half of the total sum which can be shown to the satisfaction of the Board to have been paid to persons designated as members of the staff under Article 5 (b) of the Regulations as salaries on account of services rendered by them during that year in the supervision and direction of the work of the students preparing to become Teachers in Secondary Schools.

(b) The Grant paid to any College or Department on account of any year shall not exceed 600*l.*

18. (a) No Training College will be placed on the list of Colleges in receipt of Grant, unless either (i) at least ten Recognized Students completed a course of training satisfactorily during the first year for which Grant is claimed, or (ii) the Board are satisfied that the College had an average number of not less than ten Students in Training during the three years preceding the first year for which Grant is claimed.

(b) No Grant will be paid to any Training College on account of a year ending after July 31, 1911, if the number of Recognized Students completing an approved Course of Training falls below ten in each of the three years immediately preceding that in respect of which the Grant is claimed; but if the number of students entered at the beginning of the following year reaches a minimum of ten, a grant will be payable in respect of the school year that has elapsed in respect of those students who completed their training in that year.

19. In Training Colleges where both men and women are under training the Board may recognize separate departments for men and women respectively, provided (1) that the Recognized Students of each sex are not less than ten in number, and (2) that a properly qualified woman is in special charge of the women students as principal or mistress of method.

20. No individual Student may be taken into account for more than one year in estimating the Grant payable.

21. If any of the requirements of these Regulations have

not been fulfilled, or have been fulfilled during part of the year only, the Board may, nevertheless, pay Grants either without deduction or with such deduction as they may think fit.

22. If any question arises as to the interpretation of these Regulations, or as to the fulfillment of any of the conditions of Grant, the decision of the Board shall be final.

LIST OF QUALIFICATIONS OTHER THAN DEGREES WHICH
WILL BE ACCEPTED AFTER AUGUST 1, 1911, AS QUALI-
FYING STUDENTS FOR ADMISSION TO TRAINING COLLEGES

A Tripos Certificate granted by the University of Cambridge to women, provided that the Examination taken was one which, if passed by a man after three years' residence, would entitle him to a Degree without further examination.

A diploma or certificate showing to the satisfaction of the Board that the applicant, if a woman, has fulfilled all the conditions which, if the University of Oxford granted degrees to women, would entitle her to a degree in that University; or that, under the conditions prescribed by the Delegacy for Local Examinations, she has (1) passed the Second Public Examination of the University, or (2) obtained Honors in the Oxford University Examination for Women in Modern Languages.

A special Honors Certificate of the Higher Local Examinations (Oxford and Cambridge) granted under the following conditions:—

- (i) That the certificate includes at least a pass in two languages (other than English) and a pass either in mathematics or in logic; and
- (ii) That the holder either
 - (a) has passed in four groups or sections, obtaining a first or a second class in at least two of them; or
 - (b) has passed in three groups or sections, obtaining a first or a second class in at least two of them, and holds in addition either (1) an Oxford or a Cambridge Senior Local Certificate

in Honors, including at least one subject not included in the three higher local groups or sections, or (2) a Higher Certificate of the Oxford and Cambridge Schools Examination Board, gained in one year, exclusive of drawing and music, and including at least one subject not included in the three Higher Local groups or sections.

LIST OF QUALIFICATIONS OTHER THAN DEGREES WHICH
WILL BE ACCEPTED BY THE BOARD UNTIL 31ST JULY,
1911, AS QUALIFYING STUDENTS FOR ADMISSION TO
TRAINING COLLEGES

A Tripos Certificate granted by the University of Cambridge to women, provided that the Examination taken was one which, if passed by a man after three years' residence, would entitle him to a degree without further examination.

A diploma or certificate showing to the satisfaction of the Board that the applicant, if a woman, has fulfilled all the conditions which, if the University of Oxford granted degrees to women, would entitle her to a degree in that University; or that, under the conditions prescribed by the Delegacy for Local Examinations, she has (1) passed the Second Public Examination of the University, or (2) obtained Honors in the Oxford University Examination for Women in Modern Languages.

The associateship of the Royal College of Science, London.

The associateship of the City and Guilds of London Institute.

A special Honors Certificate of the Higher Local Examinations (Oxford and Cambridge) granted under the following conditions: —

(i) That the certificate includes at least a pass in two languages (other than English) and a pass either in mathematics or in logic; and

(ii) That the holder either

(a) has passed in four groups or sections, obtaining a first or a second class in at least two of them ; or

(b) has passed in three groups or sections, obtaining a first or a second class in at least two of them, and holds in addition either (1) an Oxford or a Cambridge Senior Local Certificate in Honors, including at least one subject not included in the three higher local groups or sections, or (2) a Higher Certificate of the Oxford and Cambridge Schools Examination Board gained in one year, exclusive of drawing and music and including at least one subject not included in the three Higher Local groups or sections.

Many universities, working entirely independently of the Board of Education, now give a "teacher's diploma" upon the satisfactory completion of a year's professional work following the university course. The following regulations for this diploma, as prescribed by the Universities of London and Manchester, may be taken as typical.

UNIVERSITY OF LONDON

REGULATIONS FOR THE EXAMINATION FOR THE TEACHER'S DIPLOMA

An Examination for External Students, to be called "The Examination for the Teacher's Diploma," shall be held once in each year ; and shall commence on the Second Tuesday in December.

The Examination shall be open to Graduates of this University, to Graduates of other approved Universities,¹ to persons who have passed all the Examinations required for a degree in other approved Universities, to women who have obtained a Tripos certificate granted by the University of

¹ Graduates of other universities must send official documentary evidence of their graduation along with their Entry-Form and Fee

Cambridge, and to women who have obtained certificates showing that, under the conditions prescribed by the Delegacy for Local Examinations at Oxford, they have passed the second Public Examination of that University, or have obtained Honors in the Oxford University Examination for Women in Modern Languages.

Every candidate must, *not less than Nine Weeks* before the Examination, apply to the External Registrar for a Form of Entry, which must be returned *not less than Eight Weeks* before the Examination, accompanied by the Candidate's Fee.

Every Candidate entering for this Examination must pay a Fee of Five Pounds to the External Registrar.¹ If a Candidate withdraws his name not less than eight weeks before the Examination, the Fee shall be returned to him. If he fails to present himself at the Examination, he shall be allowed to enter for the *next following* Examination in Pedagogy on payment of a Fee of Two Pounds Ten Shillings. If he retires after the commencement of the Examination, or fails to pass it, the full Fee of Five Pounds shall be payable upon every reentry.

Candidates shall be required to state such professional training and experience in Teaching as they may have had.

Candidates shall be examined in the following subjects:—

I. The Principles of Education.² (Two Papers including an Essay.)

¹ Except in the case of Candidates who entered for and failed either to present themselves at, or to pass, the Examination in the Art, Theory, and History of Teaching, previously to the year 1902. Such candidates will, for the present, be allowed to enter for any subsequent Examination for the Teacher's Diploma upon payment, at every such entry, of a Fee of Two Pounds Ten Shillings, provided that they otherwise comply with the current Regulations.

² In matters of opinion answers will be judged according to the accuracy of thought and expression displayed, and not with reference to their agreement with the writings of any one author or school of authors.

The Aims of Education with regard to the individual pupil and the community.

The Endowment of the child as a datum of the educational process. The relation of Development to Endowment.

The fundamental aspects of development and their interrelations.

The chief stages in general development; their order and mode of succession in children of different types.

The function of the School in regard to general development with special reference to the work of the Class-teacher.

The acquisition of Skill, Knowledge, and Taste: the nature and growth of the mental function involved in these processes.

Special Psychology of the instrumental subjects (Reading, Writing, and Number).

The development of spontaneity; the forms of self-expression.

The development of Conduct; Will; Character.

The characteristics of individual children with regard to the foregoing.

The general psychological conditions of class instruction and class management.

The general principles of method; the forms of instruction; the cultivation of Interest and Attention. Methods of testing progress.

The general principles of class management; Order and Discipline.

Class instruction and organization as a means of moral development; the relation of the teacher to individual children.

The conditions of healthy school life and class work; mental economy and hygiene.

The organization and conduct of the school in relation to the work of the Class-teacher.

II. Methodology. (One paper.)

Methodology; with special reference to the methodology of a special subject or group of subjects of instruction.¹

III. History of Education. (One Paper.)

(a) Historical Evolution of Educational Ideals.

(b) The Work and Writings of Great Teachers.

(c) The Study of School Systems in operation at Home and Abroad.

Special Periods: Writers and Systems under

(a), (b), (c), to be varied from time to time.²

IV. Practical Skill in Teaching.

This will be tested by means of a lesson to be given to a class in the presence of the Examiner at some School in London; the lesson will, if necessary, be followed by discussion. Special arrangements will be made on each occasion.

Candidates will be required to prepare, for presentation to the Examiners on the first day of the Examination, full teaching notes of four lessons, taken from two, at least, of the following groups of subjects:³—

¹ Sufficient choice of questions will be afforded to enable a candidate to confine himself to the methodology of a single subject (including the necessary references to subjects connected with it in the school curriculum).

² The Special Subjects for 1909 will be:—

Herbart: *Allgemeine Pädagogik* (any translation).

The Outline of Educational History in England during the Nineteenth Century.

The Special Subject for 1910 will be:—

The Republic of Plato and its bearing on the development of modern educational thought and practice.

The Special Subject for 1911 will be:—

The Republic of Plato and its bearing on modern educational thought and practice.

³ The date on which these Notes must be received by the External Registrar will be given on the Form of Entry.

(a) Language and Literature.

(b) History and Geography.

(c) Mathematics.

(d) Natural History and Physical Science.

The notes should indicate (i) the age of the pupils for whom the lesson is intended; (ii) the previous knowledge which they are assumed to possess; (iii) the diagrams, maps, apparatus, or other visible illustrations which it is proposed to use.

In giving the lesson, candidates will be expected to follow, in the main, the course described in the notes.

The Examiners may require a Candidate to give a second lesson if in their judgment a second lesson be necessary; in which case the Examiners shall select for the subject of the lesson a particular topic from a branch or branches of knowledge named by the Candidate.

The Examination, which shall be both written and practical, shall extend over three days, and shall be conducted as follows: —

WRITTEN EXAMINATION

Tuesday,

Morning, 10 to 1 { Principles of Education.
Afternoon, 2 to 5 }

Wednesday.

Morning, 10 to 1. Special Methodology.
Afternoon, 2 to 5. History of Education.

PRACTICAL AND ORAL EXAMINATION

Practical Skill in Teaching and in the Management of a Class.

[This part of the Examination will be held, if practicable, in the same week as the Written Examination, the place, and hour for holding it being announced previously to the conclusion of such Written Examination.]

Candidates shall not be approved by the Examiners unless they have shown a competent knowledge in all the subjects of examination, and have given satisfactory evidence of practical skill in teaching.

In the course of the second week following the conclusion of the Examination, the Examiners shall publish the names of the Candidates who have passed, arranged in alphabetical order, and shall indicate, by distinguishing marks placed against their names, the Candidates (if any) who excel in the practical or written parts of the Examination, or in both.

A Certificate to be called the "Teacher's Diploma," under the Seal of the University, and signed by the Chancellor, shall be delivered to each Candidate who has passed, after the Report of the Examiners shall have been approved by the Senate.

UNIVERSITY OF MANCHESTER

REGULATIONS FOR THE TEACHER'S DIPLOMA

The Teacher's Diploma is designed to give a general course of pedagogic principles and practice to meet the wants of those who design to become teachers in schools. It is primarily instituted for teachers in Secondary Schools, but it also affords opportunities of studying the methods and practice of Primary Schools. It is recognized by the Board of Education as a qualification for certificated Teachers. (See Education Code 60 (b).¹)

The Course of Training is planned so as to satisfy the requirements of the Board of Education for the Training of Teachers in Secondary Schools, and students will be expected to fulfill such requirements relating to practical work as the Board may from time to time impose through their Regulation. (Candidates should procure a copy of these Regulations, price 1 d., Wyman and Sons.)

¹ Wyman and Sons, Ltd.

1. Candidates before receiving the Diploma must have graduated or passed the Final Examination for a degree in this or some other University of the United Kingdom, provided that a candidate who has taken Education as a subject for his degree may not receive the Diploma until he has presented and passed in some subject other than Education, not being a subject previously taken by him, as prescribed for the Final Examination for the degree of B.A. or B.Sc.

2. The examination for the Diploma will be divided into two parts, (a) and (b).

(a) *Written Examination.* Candidates will be required to pass a written examination in the following subjects:—

- (i) The Mental and Physical Life of boys and girls at school.
- (ii) Systematic Review of the Principles of Education.
- (iii) Portions of the History of Education, with special books as prescribed.
- (iv) Method in teaching (including the Preparation of Lessons) and School Management.

(b) *Practical Examination.* Candidates will be tested in the practice of Education:

- (i) By reports by the Professors of Education on their work in teaching during their period of training.
- (ii) By teaching before the Examiners and submitting to them written records of their work in Schools.

Before admission to an examination, candidates will be required to pay a fee of £2, and to present certificates of satisfactory attendance on the above subjects.

3. Candidates will be required to undergo a Course of Training in the Department of Education in this University (a) for at least one year, or (b) for periods amounting all to-

gether to not less than one year under circumstances which, in the opinion of the University, render the periods at least equivalent to a continuous year. This year of Training must be taken at a date subsequent to passing the Final Examination for a degree (or the equivalents thereto described above), provided that the Senate shall have power to allow a candidate to undertake his training for the Diploma though he has not completed one of his courses for the degree, such degree course to be pursued in the same year as the Diploma course.

4. Candidates who desire to offer evidence of special acquaintance with methods of teaching particular branches of a school curriculum, or with methods of teaching in any particular type of school, will be afforded opportunity of displaying this acquaintance in the examination. An indication of special qualifications for teaching one or more such branches may be given in the Diploma.

5. The prescribed course of training shall include attendance for the entire school day for a period amounting to three school weeks; this attendance shall be made during University vacation. Either in this practice or in practice taken during the session at least forty hours' attendance shall be made in an approved Secondary School; and candidates who take the Diploma for the special purpose of teaching in Secondary Schools must spend two thirds of the teaching practice either in Secondary Schools or in the Fielden Demonstration Schools.

6. The examination in practical work is held in May or June, and the written examination in June. Equal importance will attach to each part of the examination. The list will be divided into two divisions, I and II. The names of candidates who have attained a specially high standard in both parts of the examination may be marked as having passed with distinction.

In most cases some observation and practice teaching are required in schools that are more or less under the control of the university authorities. In other cases the diploma is given for

theoretical work only. The Department of Education of the University of Manchester is the only one in England that maintains a demonstration and practice school of its own.

England is wide awake to the problem of training teachers for the secondary schools, but, with her usual conservatism, she is disposed to proceed cautiously until experience shall have given a basis for judgment.

Scotland. — The prevailing standards for the training of teachers for the secondary schools are given in the following extracts from the Regulations for the Preliminary Education, Training and Certification of Teachers for Various Grades of Schools, 1908, issued by the Scotch Education Department.

The classification of schools is as follows: —

Primary School. — A school or a department of a school giving an education based entirely upon English to pupils who are, as a rule, below the age of 14. A Primary School may contain individual pupils or small sections of scholars who are being instructed on the lines of an Intermediate or even, in exceptional circumstances, of a Secondary School.

Intermediate School. — A school providing at least a three-years course of secondary education (including, as a rule, instruction in a language or languages other than English) to pupils who, on entering, have reached the stage of attainment in elementary subjects indicated in Article 29, I, of the Code ("qualifying examination").

Secondary School. — A school providing at least a five-years course of secondary education beyond the qualifying examination stage.

An Intermediate School should retain its pupils until at least the age of 15 to 16, and the normal attainments of the pupils at that age should be those indicated by the Intermediate Certificate.

A Secondary School should retain its pupils till at least the age of 17 to 18, and no pupil who has not qualified for the award of some form of Leaving Certificate, or for one of the alternative Technical or Commercial Certificates, can be held to have completed the course satisfactorily.

Though the education of the Intermediate School is of the nature of secondary, as distinguished from primary education, the choice of subjects and the relative importance to be given to them at various stages of the curriculum may properly vary within certain limits according as the school is one providing a three-years course or one providing a five-years course. The curriculum of each type of school should be so arranged as to present, at the age at which the pupils normally leave, a certain unity and completeness.

On the other hand it is important that as between the Secondary School and the various Intermediate Schools of the same district there should be no unnecessary divergence of curriculum in the earlier stages, so that transference from the one to the other may not be impeded.

TEACHERS OF HIGHER SUBJECTS

42. Persons who at or before the date of these Regulations (7th June, 1906) were actually serving in recognized positions in Intermediate and Secondary Schools under the inspection of the Department will rank as specially qualified teachers of the relative subjects in terms of the following Articles.¹ But, except with regard to such persons, the Department may at any time require, as a condition of efficiency, that any or every teacher appointed to the staff of such

¹ Up to July 31, 1909, a similar privilege will be accorded to all who have given at least a year's satisfactory service in such positions. Thereafter this privilege will be limited to persons qualified for recognition as *Certificated Teachers*, or who have been provisionally recognized by the Department as Assistant Teachers in Intermediate or Secondary Schools, before the said date.

schools shall produce evidence of having been properly trained with reference to the particular subject he is to teach.

43. Applicants for recognition as specially qualified teachers of the undermentioned Subjects in Intermediate and Secondary Schools may or may not be holders of the General Certificate.¹ Subject to professional training and probation (Articles 44 and 52), and subject also to the right of a Provincial Committee to recommend exceptions in individual cases, the following are the requirements which will be necessary for such recognition:—

- (a) In the case of English the applicant must either (i) hold the degree of an approved University with Honors in English; or, (ii) having taken an ordinary degree,² produce Certificates showing that, during his University course, he has given attendance at the Ordinary and the Honors Classes of English Literature, and at the Ordinary Class of History, and has displayed in the work of each of these such proficiency as may, in the opinion of the Professor or Lecturer, be reasonably required from one who is to teach English in Intermediate and Secondary Schools. In addition, whether applying under (i) or under (ii), he must produce a similar Certificate of satisfactory attendance and work in connection with an ordinary course in Geography, extending over one session.³
- (b) In the case of any Modern Language other than English, he must, after obtaining the relative Higher

¹ [The General Certificate qualifies for teaching in Primary Schools.]

² Or, alternatively, such University course as the Provincial Committee may, with the sanction of the Department, approve as equivalent to an ordinary degree.

³ Where no Ordinary University Course of Geography is available, the Provincial Committee shall establish or shall recognize an Ordinary Course of Geography outside the University, and where no Higher or Honors University Course of Geography is available, the Provincial Committee may, if they see fit, establish or recognize a Higher Course of Geography outside the University.

Grade pass at the Leaving Certificate Examination, attend University Classes in the language chosen during at least two sessions, one of which must be spent in an Honors Class, and must obtain a satisfactory report on his work from the Professor or Lecturer as in (a). He must also submit to such further test (oral or other) of knowledge of the language as the Department may impose, and must either before or after attending the University Classes specified above — spend a year of study, under conditions approved by the Department, in some country in which the language in question is spoken.¹ Such year of study may form part of a curriculum approved for Students in Full Training (Article 18). If the applicant does not hold the ordinary degree of an approved University, he must produce evidence of having undergone such course of University culture as, taken along with his year of study abroad, the Provincial Committee may, with the sanction of the Department, approve as equivalent to an ordinary degree.

- (c) In the case of Latin and Greek, he must hold the degree of an approved University (see Article 15) with Honors in Classics.
- (d) In the case of Mathematics, he must hold a similar degree with Honors in Mathematics and Natural Philosophy, or a degree in Pure or Applied Science, the standard for which in Mathematics and Natural Philosophy shall have been accepted by the Department as sufficient, and he must also have undergone an adequate discipline in the methods of Experimental Science, testified to by a pass in Science at the Leaving Certificate Examination, or by other evidence satisfactory to the Department.

¹ Until further notice the requirement as to residence abroad will not be strictly enforced.

- (e) In the case of Science, he must hold a similar degree in Pure Science (Physical or Natural) and must also have undergone an adequate discipline in the methods of Experimental Science, testified to as in (d).
- (f) To meet the case of Schools which may require specially qualified Teachers of History or of Geography, recognition of special qualification will be granted :—
 - (i) For History, if the applicant holds the degree of an approved University with Honors in History; or, alternatively, if, being qualified for recognition in English, he has also attended an Honors Course of History, extending over one session, and can produce a satisfactory report on his work as in (a).
 - (ii) For Geography, if the applicant, being qualified under any of the preceding sections or under subsection (i) of this section, has attended a Higher Course of Geography, extending over one session and has obtained a satisfactory report on his work, as in (a).

44. Applicants for recognition in terms of this Chapter, if they be not already holders of the General Certificate, must have undergone an approved course of professional training, theoretical and practical, extending over such period as the Provincial Committee may propose and the Department may sanction. This course must include adequate instruction and practice in the methods of teaching the particular subject, or subjects, for which recognition is asked. In all cases, applicants during the period of practical training must also receive instruction as to the organization and management of Intermediate and Secondary Schools in general, and they will be expected to make themselves acquainted with the actual working of schools of this class in connection with the Training Center to which they are attached.

45. The holder of a General Certificate, provided he fulfills the requirements set forth in Article 43, and provided his course of professional training has included training and instruction as described in Article 44, may receive an indorsement of qualification to teach any of the higher objects enumerated above. Such indorsement may be obtained either on completion of the period of Full Training (Chapter III), or at any subsequent time on fulfillment of the required conditions.¹

46. Persons other than holders of a General Certificate may, with the approval of the Provincial Committee, omit from their course of professional training (Article 44) practice in teaching all or certain of the Primary subjects, but no Certificate granted in these circumstances will carry with it a qualification as teacher of Primary Schools, nor will the holder be reckoned as a Certificated Teacher for the purposes of the Elementary School Teachers (Superannuation) Act.

TEACHERS OF SPECIAL SUBJECTS

47. Persons who at or before the date of these Regulations (7th June, 1906) were actually serving as recognized teachers of certain special subjects (cf. Art. 37 (b)), will rank as recognized teachers of these subjects in terms of this Article. But, except with regard to such persons, the Department may at any time require, as a condition of recognition, that any or every such teacher shall produce evidence of having been properly trained, with particular reference to the subject he is to teach. Special certificates (or, in the case of Certificated Teachers, indorsements upon their Certificates) of qualifica-

¹ Where, in any individual case, it can be shown to the satisfaction of the Provincial Committee that a person otherwise qualified has been debarred through special causes from fulfilling the precise requirements specified in Article 43, an indorsement or some corresponding form of recognition may be granted on the production of other evidence of corresponding attainment, together with evidence of sufficient skill in teaching the higher subject in question, provided such evidence is approved as satisfactory by the Department.

tion as teachers of these subjects will be granted by the Department to the holders of Diplomas recognized by the Department for the purpose,¹ provided that the holder of the Diploma has in each case reached a certain standard of general education, satisfactory to the Department, before entering upon his Diploma course; has successfully completed such part of the general course of professional training for teachers (Articles 19 and 22) as may be prescribed, and has served the period of probation required by Article 53.

48. Such Special Certificates will not confer recognition as a Certificated Teacher for the purposes of the Elementary School Teachers (Superannuation) Act, nor will they be accepted as a qualification for employment on the general staff of any school of any grade. But they may be held along with the General Certificate (Article 33), and a holder may at any time qualify for the award of a General Certificate on completing the prescribed conditions.

¹ The Diplomas which will be made the basis of a special qualification are as follows :—

- (a) The Diploma of a Central School of Art — for a special qualification to teach Drawing ;
- (b) The Diploma of a Central Technical College or Institute — for a special qualification to teach any branch of applied Science or Technical Industry to which the Diploma is relative ;
- (c) The Diploma of a College of Agriculture — for a special qualification to teach Agriculture or Horticulture ;
- (d) The Diploma of a Commercial College — for a special qualification to teach any Commercial subject to which the Diploma is relative ;
- (e) The Diploma of a School of Domestic Economy — for a special qualification to teach any branch of Domestic Economy to which the Diploma is relative ;
- (f) The Diploma of a Physical Training College — for a special qualification to conduct Physical Exercises and School Gymnastics ;
- (g) Sufficient attendance at a recognized course of instruction and satisfactory proof of craftsmanship — for a special qualification to give instruction in woodwork, iron work, or other recognized manual occupation for schools ;
- (h) The Diploma of a University or of a recognized Central Institution — for a special qualification to teach Music.

The institutional means for the training of teachers may be briefly described as follows. The Committee of Council on Education in Scotland is the supreme authority on educational affairs. In 1905 this Committee provided for the appointment of four provincial committees on the training of teachers for both primary and secondary schools. These committees were established in connection with the Universities of St. Andrews, Glasgow, Aberdeen, and Edinburgh. The members were chosen so as to represent not merely the University but all of the important educational interests of the district concerned. For example, the committee organized in connection with St. Andrews University consisted of four members to be elected by the University Court, one representing the Dundee Technical Institute, three representing the School Board of Dundee, nine representing various other school boards, two representing the Managers of the more important secondary schools, three to be selected by the members already mentioned, and finally His Majesty's Chief Inspector of Schools, who holds membership without a vote. These committees may provide for the establishment of training colleges in connection with any educational institution within the district. Denominational colleges may receive aid from the Government for this purpose, but they must submit to inspection by Government officials and must meet all the conditions prescribed. These colleges have joined heartily in the work.

A few extracts from the Minutes of the Council are of particular interest, for the Scotch system of training teachers for the secondary schools is especially rich in suggestions for the United States.

MINUTE OF THE COMMITTEE OF COUNCIL ON EDUCATION
IN SCOTLAND, DATED 30TH JANUARY, 1905, PROVIDING FOR
THE ESTABLISHMENT OF COMMITTEES FOR THE TRAINING
OF TEACHERS

The object which the Secretary for Scotland has in view in establishing Committees for the training of teachers under the provisions of the accompanying Minute, is to enlarge and improve existing facilities for the training of teachers.

In doing so, he desires at the same time to insure that that training shall be brought into as close connection with the University organizations as the attainments of the students upon entering admit of, and to provide means whereby School Boards and others directly interested in the question of the supply of teachers shall be in a position to secure due consideration for their views.

The Secretary for Scotland recognizes to the full the value of the services rendered to the country by various church organizations, in the administration of funds for the training of teachers in the case of the existing Training Colleges. The Minute, therefore, makes no change necessary in the position of these Colleges, but it provides a means whereby transference of management to the newly constituted Committees may be easily effected under adequate guarantees for the continuance of the religious instruction at present given in these Colleges.

Each Committee shall have power to provide, whether in University Classes or otherwise, courses of instruction suitable for the training of teachers (including teachers for Secondary Schools). These courses may include, if the Committee so determine, instruction in religious subjects. They shall be held in towns where a University or a part of a University is situated, but the Committee shall also have power to institute, with the consent of the Department, subsidiary courses

of training at approved centers in connection with either a Secondary or a Higher Grade School.

Each Committee shall have power to appoint officers at suitable salaries either for purposes of instruction or of discipline, and to prescribe courses of studies for the students collectively or for individual students, as well as to make regulations for the proper behavior and conduct of the students.

It shall be a condition of Parliamentary Grant to any School Board or of a grant under any Minute of the Department to any endowed school that the School Board or the Governors, as the case may be, shall grant to the Committees instituted under this Minute such access to their schools and such facilities for practice in teaching as may be agreed upon or as may, if necessary, be determined by the Department, who shall also determine what payment shall be made for the use of such schools.

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